Madras Information

Published every month by the Director of Information and Publicity
Fort St. George

8 MAY 1952

Vol. VI, No. 5 "WE SEEK TO SERVE AND NOT TO COMPETE" May 1952

CONTENTS

	PAGE
CHIEF MINISTER'S APPEAL—	
1. Task of Relieving Poverty and Distress	3
RURAL RECONSTRUCTION—	
2. Tirumangalam Makes Thrilling Progress	4
3. Location of Community Projects	5
HEALTH—	
4. Is Cancer Curable—By Dr. K. M. Rai	7
5. Water Supply for Salem	10
CULTURE—	
6. President's Award to Musicians—By Sri C. Ramasubban	11
INDUSTRIES—	
7. Central Tobacco Committee	13
TOURIST TRADE—	
8. India and the Tourist Trade	14
IRRIGATION—	
9. Drought Battle in Cyprus	16
PROGRAMMES—	
10. Rehabilitation of Rayalaseema—By Sri B. Joogappa, I.A.S.	17
TRANSPORT—	
11. Symbol of New Spirit of Service	21
CO-OPERATION—	
12. Multipurpose Co-operative	23
13. Resettlement of Ex-Servicemen	24
POWER—	
14. Electricity for Villages	26
FOOD—	
15. Migration and Food—By Dr. Julius Isaac	29
AGRICULTURE—	
16. Agricultural Department in 1950–51	33
17. Cotton Cultivation in Rice Fallows	34
FISHERIES—	
18. Two Vegetarian Fishes By Sri V. D. Spurgeon	36
NEWS AND NOTES—	
19. P. & T. Facilities in Madras Circle	38
PROHIBITION—	
20. Neera—By Sri Radhakrishna Rao	40

COVER PAGE—
A recent study of the Hon'ble Sri C. Rajagopa

Madras Information and Language Counterparts

Advertisement Tariff

Particulars.	English.	Tamil.	Telugu.	Malayalam.	Kannada.	Hindi.
	RS.	RS.	RS.	RS.	RS.	RS.
Outside cover ..	200	150	150	150	150	150
Inner cover full page ..	150	100	100	100	100	100
Half page ..	80	50	50	50	50	50
Ordinary page :						
Full page ..	120	75	75	75	75	75
Half page ..	60	40	40	40	40	40
Quarter page ..	30	20	20	20	20	20

Name of Publications :

Madras Information	..	English
Sennai Seithi ..	..	Tamil
Rashtra Samacharamu	..	Telugu
Madras Patrika	..	Malayalam
Madras Samachara	..	Kannada
Dakhini Hind ..	..	Hindi

For further particulars please apply to :

The Director of Information and Publicity, Government of Madras,
Fort St. George, Madras

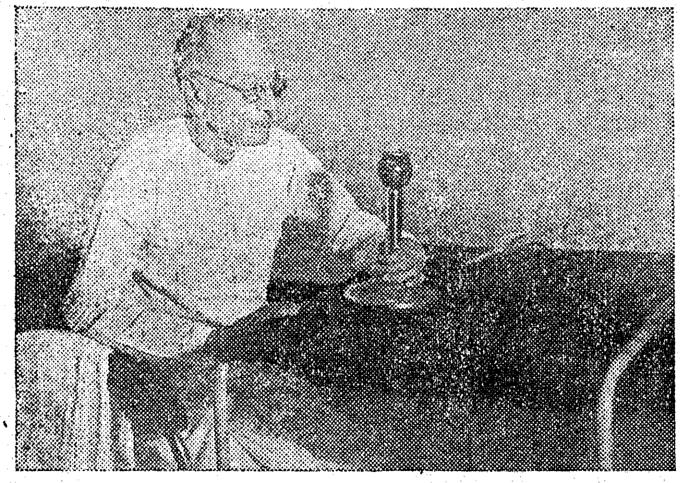
or

Sri K. S. Srinivasan,
Sole Proprietor, Creative Publicity Service,
No. 20, Nar[illegible]nappa Naick Street,
Mannadi, Madras-1

Sole Advertisement Agent for Madras Information and Language counterparts

Task of Relieving Poverty and Distress

Chief Minister Appeals for Patriotic Devotion



Sisters and brothers !

I was sworn in today* as Chief Minister of the State of Madras. May I say a few words to you before I enter on my duties and ask for a blessing ? You are all aware of the circumstances under which the leadership of the Congress Party in Madras and the office of Premier for this State have been placed on my shoulders. I had planned and was living in anticipatory fancy in my garden of peace, when suddenly the situation developed as it did and down came this like a bolt from the blue.

The unanimous demand of the Congress Legislature Party reinforced by the insistent appeal of all its senior members created a sudden situation which I could not callously resist. The alternative would have been a denial of all the principles which I have been declaring and preaching as to the sacredness and equal nobility of all work such as one is imperatively called upon to perform for the community. It is no doubt recklessness to undertake this task which, as a friend observed in a letter to me, involves more than one labour of Hercules. But it is a recklessness compelled by duty.

With Faith in God

I am old and can claim therefore the traditional right to respect and consideration on that account. I depend very much on this to make up for the necessary deficiencies arising out of my age. I cannot run about the country accepting all sorts of functions as a young or middle-aged man could do. When I scanned the letters and messages of joy that have inundated me this week, I trembled in fear. " How can I expect to be able to fulfil the great hopes roused by this event ? " I asked myself. But something inside me said, " Why do you fear ? Have you lost faith in God ? Surrender yourself to Him and all may be well."

The affection and almost superstitious confidence that I read in the numerous messages received by me indicate a countrywide fresh psychology which, I am hopeful, will be in itself an asset. I referred the other day to Agriculture and Character. In respect of one of these, namely, Character, there is nothing wanted from outside but one's own will to be made up. I think our people have got tired of *adharma* and may God help them to resolve firmly and well. If I could see an improvement in the moral atmosphere around us, it would be the greatest joy of my life, and I shall not mind the travail and the risk involved in this strange, sudden event in my life.

" Perilous Adventure "

I ask for the wholehearted co-operation of you all, with me and every one of my colleagues. Do not think in terms of castes and groups, political, professional or others. It is only the general confidence that has been shown in me that sustains me in this what I know is a perilous adventure. I feel I shall have the goodwill of all good and patriotic people and their sincere co-operation in their respective spheres, be it in the Government offices or in the bazaars or in other places where the public are served ; from those engaged in Government Service or in trades or in industries, or leading their quiet and useful lives as citizens, especially those engaged in raising the food the people live on and those engaged in building up the minds of boys and girls either as parents or as teachers.

Let there be a silent but determined war against evil thoughts and indecency of speech or action or entertainments, and against all forms of exploitation for selfish ends. Let every father and mother realise and remember that the good name of Madras will serve our children better than anything else we can make and provide for them losing or risking that good name of Madras. Let us try to recover this which I fear we have lost. The totality of character or reputation of the State is made up of individual behaviours which are entirely in the hands of each one of us. Always let us realise the immediate presence of God everywhere and at every moment. This is a fact and not a fable. Do not believe anything said about anybody without hearing the other side. Every responsible citizen should deem himself a judge bound by the fundamental laws of fair play which are really the same as what is embodied in judicial procedure minus the formalities. Let us not slander one another. Slandering others is not a form of public service or a substitute for our own good behaviour. May all our efforts be to raise ourselves and not to pull others down.

Need for Patriotic Devotion

My acceptance of this task has rightly or wrongly evoked general rejoicing. It has also received the approval of group leaders although expressed grudgingly and guardedly. It is also an encouraging circumstance that it has roused full-throated resentment in certain quarters, which makes me think paradoxically that I have probably done right. I appeal to everyone to relax from angry moods and tensions and fill their mind with patriotic devotion. Let us leave for our children a fairly happy Madras for an inheritance. Not property, but order and security and good government are the biggest wealth we can leave behind for the boys and girls whom we leave behind us. All property gains or loses value according to this great and important coefficient of wealth, namely, order and security.

(*Continued on page* 32)

* *Broadcast to the people of Madras State by Hon'ble Sri C. Rajagopalachariar, Chief Minister of Madras, on 10th April* 1952 *at* 8-45 *p.m.*

Tirumangalam Makes Thrilling Progress

The concept of local self-sufficiency—self-sufficiency in food, clothing and other basic essentials of life—is slowly gaining momentum. The significance of expressions like 'Grama Swaraj', and 'Panchayat Raj', is gradually dawning on people in the light of the successful working of the pilot schemes launched here and there in India and the progress of the Rural Welfare Scheme in this State. Discerning foreign observers too have begun to take notice of this new trend.

Recently, Miss Dorothea Wehrwein of the Food and Agricultural Organization toured the Tirumangalam Firka of the Madurai District with Sri G. Venkatachalapathi, Director of Rural Welfare. She visited the Vidyalayam where Grama Sevaks are being given training in the fundamental principles and practice of rural reconstruction. Miss Dorothea Wehrwein was impressed by the spirit in which the Grama Sevaks were equipping themselves for their role in society—of service and dedication to their fellow-men. They were weaving their Khadi, they were getting instructed in the running of village industries; they cooked their own food, washed their vessels and cleaned their latrines.

The party also visited twelve villages in the Model Firka, and saw the working of the scheme in its many-faceted aspects.

Kallupatti.—An important item of work done in this village that attracted the attention of the visitors was the work done among the women of the village. In the past six months, 150 families have produced 21,385 hanks of yarn and have exchanged them for clothing required by the families to the value of about Rs. 4,500. In addition to this, a sum of Rs. 510 out of the same was spent on agricultural requirements, purchase of ornaments and brass vessels and for medicines and food articles. Still there was a saving of Rs. 120 which has been deposited in the Savings Bank for being drawn in times of need.

Chitlapatti.—In this village consisting of about 150 Harijan houses, a school building worth Rs. 5,000, a well with parapet wall and platform and bathroom estimated to cost Rs. 1,500 and a village latrine estimated to cost Rs. 1,200, have been built with the Government aid of just Rs. 1,000. The neat and tidy appearance presented by the village was very much appreciated by the visitors.

Appakarai.—The neat community latrines and complete village drainage built with the full co-operation of the villagers, with no cost to Government, the only assistance given being the supply of cement at controlled price and technical advice, was a pleasant surprise to the party when they visited this village. A grant of Rs. 750 has been given by the Government towards various works executed in this village including a village school proposed to be raised and in respect of which a voluntary contribution of Rs. 2,500 and two acres of land free of cost have already been collected.

Gopalapuram.—In this village a derelict irrigation tank was re-excavated by the voluntary labour of the villagers.

Pudupatti.—In this village, a school building likely to cost Rs. 10,000 has been constructed by the self-efforts of the villagers. The school is also being used as a community centre. Here again the village drainage has been built by the villagers themselves with very little cost to the Government. When there is not enough work to be done in the fields, 55 families out of the 155 houses in the village devote their spare time for the production of Khadi and for the weaving of their own requirements in clothing.

Kallanai.—In this village an abandoned tank which had long gone into disuse, was renovated by the villagers, men and women working on it. Every family in the village made contributions in some shape or form—in cash, kind or labour towards the construction of tank. Some of them gave free labour for two or three days in a week. Some gave free service of carts and bullocks for carting purposes. Others gave bricks, cement, etc. and also cash contributions. Thus the villagers have been able to achieve in one year the restoration of the tank, which would otherwise have cost at modest computation Rs. 30,000. The restoration of the tank will bring into cultivation an additional ayacut of 60 acres of land in addition to the increased yield that can be expected in the existing ayacut. For all this work, the Government have given only the implements needed at a cost of Rs. 500. This work is an astonishing feat of self-effort of the Rural Welfare staff of that area.

Nedungulam.—This village presented a typical appearance of what could be achieved by emulation of the Gandhian principles. Here an aged couple belonging to a respectable family devoted their attention to village drainage, village sanitation, etc. In the course of one year, this couple realised a sum of Rs. 150 from the village waste collected by them. Following this example, all the villagers have now taken to compost making from waste vegetable matter. A maternity and child welfare centre has also been opened in this village by the efforts of the villagers.

Miss Dorothea Wehrwein was greatly impressed by the magnificent work done in this selected area. The sanitary improvements, conversion of night-soil into manure, the village drainage and initiative of the villagers in raising their own stature with the minimum aid given by the Government, and often even without waiting for it, spoke volumes for the new spirit and the new life that have come into these villages. The visitor expressed the view that while at Etawah (U.P.) emphasis was laid on agricultural development, here at Madras there was greater emphasis on social and economic development in general. She was, however, of the opinion that the agricultural staff in the selected firkas should be strengthened for more intensive work. Recording her impressions, Miss Dorothea Wehrwein wrote: "It was very thrilling to see the changes and progress which can result from devoted and perserving work . . . ".

Gift for Hospital

The Government have accepted, with thanks, the gift of a G.E.C. 5-Valve Radio Set from Srimathi Thillaiammal, Secretary, Coimbatore Seva Nilayam, Coimbatore, for the entertainment of the patients in the Government Headquarters Hospital, Coimbatore.

Location of Community Projects

The following areas in Madras State have been selected by the Central Committee appointed under the Indo-American Technical Co-operation Agreement for Community Projects :

Madras (six Projects) ;

1. Kurnool-Cuddapah Canal areas.
2. Coimbatore (Gobi-Erode-Bhavani-Dharapuram Tahsils).
3. Malabar (Palghat).
4. East Godavari (Kakinada-Peddapuram).
5. South Kanara (Karkal-Mangalore).
6. Madurai (Nilakottai-Melur-Madurai).

A Project area comprises roughly about 300 villages with a total area of about 450 to 500 square miles, a cultivated area of about 150,000 acres and a population of about 200,000. Each Project area is divided into three Development blocks, each consisting of about 100 villages and a population of about sixty to seven y thousand.

Thus the areas now selected will cover about 260,000 square miles in about 16,600 villages all over India, inhabited by about a crore of people. A few more areas or development blocks are expected to be selected shortly, covering Delhi and some other States.

Other areas selected in other parts of India are :

Part 'A' States

Assam (two Projects and two Development blocks); Bihar (four Projects); Bombay (four Projects and one Development block); Madhya Pradesh (four Projects); Orissa (three Projects); Punjab (four Projects); Uttar Pradesh (six Projects); West Bengal (eight Development blocks).

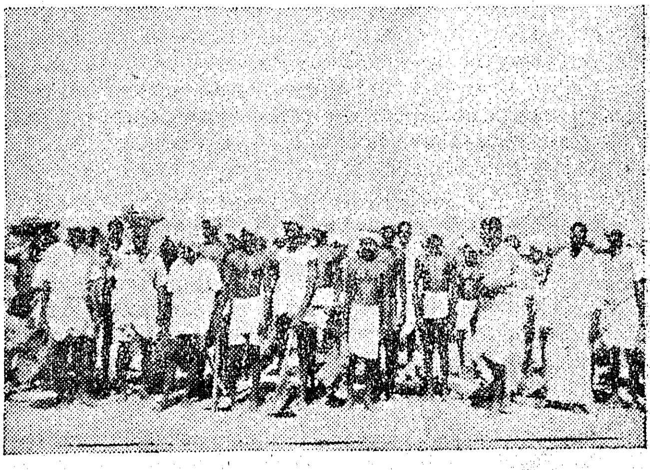
Part 'B' States

Hyderabad (two Projects and one Development block); Madhya Bharat (two Projects); Mysore (one Project); Pepsu (one Project); Rajastan (two Projects and one Development block); Saurashtra (one Project); Travancore-Cochin (two Projects).

Ajmer (one Development block); Bhopal (one Project); Bilaspur (one Development block); Coorg (one Development block); Himachal Pradesh (one Project); Kutch (one Development block); Manipur (one Development block); Vindhya Pradesh (one Development block).

The Community development programme in 46 Project areas and 19 Development blocks, spread all over the country, has been approved by the Planning Commission in its capacity as the Central Committee under the Indo-U. S. Technical Co-operation Agreement. These are to be undertaken immediately by the Central and State Governments, the underlying idea being to develop to the fullest extent possible the material and human resources of the area, through the co-operative endeavour of the people themselves with active assistance from the Sta e.

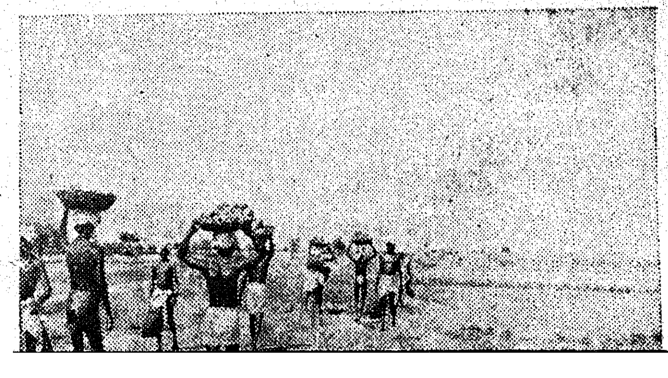
As additional agricultural production is the most urgent objective, the projects have been located largely in those areas where on account of irrigation facilities or assured rainfall, additional effort is likely to produce the most substantial results.



A ROAD IS BUILT : The road from Mangammapatti to Kanmai was only a swampy cart-track. The villagers decided to build a good mile long road. A 100 volunteers, one from each house, assembled one morning.

YOUNG AND OLD took part in the construction, with only a short midday break. Crowbar, spade and basket were used to good purpose.

ROAD NOW READY : Thus self-help provided the villagers of Mangammapatti with a good road fit for bullocks and carts. The Rural Welfare staff aided in the work.



For the time being the Committee's main emphasis is on the rural community projects of the basic type having predominent bias on rural development. Urban development also comes within the sphere of a community project but owing to financial and other limitations the Committee considers that for the time being it is not possible to undertake the development of the urban component of the programme except in respect of a restricted number of projects which concern the rehabilitation of displaced persons or very under-developed areas.

The lines of activity to be undertaken in these projects cover all aspects of development including agriculture and rural development, cottage and small-scale industries, education, health, housing, reclamation of culturable waste land, agricultural extension services, encouragement of village arts and crafts, animal husbandry and improvement and extension of communications, etc.

Location in States

In allotting Project areas or Development blocks to particular States the main consideration has been the area of the State and its capacity to absorb big projects. All Part "A" States except West Bengal, all Part "B" States and Bhopal and Himachal Pradesh among Part "C" States have been allotted community project areas.

In the case of West Bengal, eight Development blocks specially adapted to fill the need of rehabilitation of displaced persons have been allotted. These blocks would be equivalent to naarly three Project areas. The State Government had suggested location o seven blocks in the area. The Planning Commission has added the eighth block comprising about 100 villages around Fulia in Nadia District.

Extra Allotment by the Planning Commission

The allotments of areas have, in most cases, exceeded the original suggestions made by the State Governments in response to the Planning Commissioner's earlier communication to them asking for suggestions regarding the areas in which they would like community projects to be located and the number of such projects. In the case of Madras, the six projects allotted by the Commission include an additional project in Madurai District so as to secure two projects for the Tamil Nad, as requested by the State Government. Four approved projects in Madhya Pradesh include an additional project in the area which was merged in the Madhya Pradesh as a result of integration under the new Constitutional set-up. In Assam, where two Projects and two Development blocks have been approved, the latter two have been specially recommended by the Planning Commission and they will be located in the tribal area.

Punjab and Bombay

In regard to the Punjab, where four projects have been approved, the Planning Commission says: "In view of the considerable development work which has already been done in Nilokheri and Faridabad and the investment which has been incurred, the Central Committee considers that the benefits of integrated rural and urban development are likely to be realised sooner in the areas around these townships than elsewhere." The Committee has, therefore, recommended the siting of one Development block around Nilokheri and two Development blocks around Faridabad which will comprise one full Project.

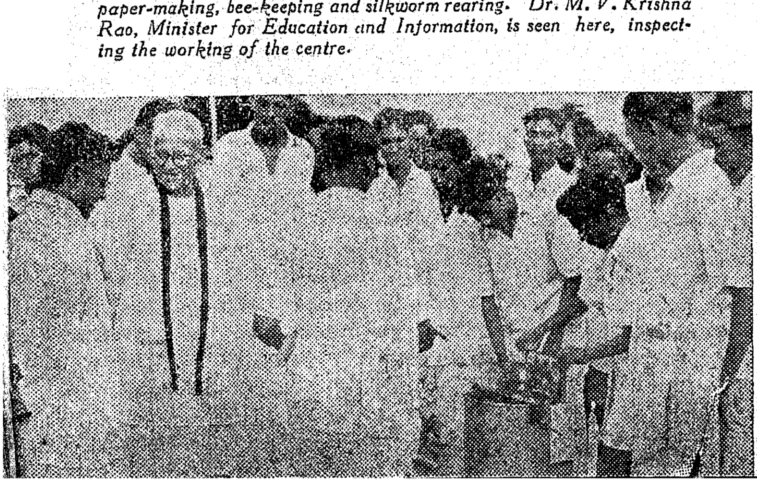
In Bombay, the Committee has recommended one additional Project and one Development block in excess of the three Projects suggested by the State Government. In Rajasthan, an additional Project has been suggested In Jodhpur and an extra Development block in Bikaner. This makes up a total of two Projects and one Development block in the Rajasthan State. In Hyderabad, the total of two Projects and one block includes an additional Development block suggested by the Commission.

Approximate Cost

The total cost of the community projects including the Development blocks has been roughly estimated at about

(*Continued on page* 24)

VISIT TO GOKULAM: At the Gokulam Village Training Centre, 34 inmates are trained in crafts like spinning, weaving, paper-making, bee-keeping and silkworm rearing. Dr. M. V. Krishna Rao, Minister for Education and Information, is seen here, inspecting the working of the centre.



Scheme for Survey of Cottage Industries

The Government have sanctioned a scheme for the survey of cottage industries in the State and have directed that the survey be undertaken without delay.

According to the scheme, the survey of cottage industries in this State will be done on the method of 'stratified random sampling'. Considering the district as the strata, the number of industrial units to be investigated in each district, which is proportional to the number of people, engaged in the cottage industries in that district, is reported to be about 9,460. The scheme also makes provision for a sample of 20 units on the average per each district, in respect of new industries, which may have sprung up in the last two decades. The total number of units to be investigated would, therefore, be roughly 10,000 in the entire State.

This action has been taken on the resolution adopted by the State Cottage Industries Board, that a comprehensive survey of cottage industries be undertaken immediately, collecting full data, regarding the availability of raw materials, man-power, etc.

Is Cancer Curable?

By DR. K. M. RAI, Director of the Barnard Institute of Radiology

The question " Is Cancer Curable ?" is so often asked by almost everybody irrespective of his or her education or status in life, that it merits scientific consideration and scientific answer. It is therefore appropriate that on the eve of the celebration of the Second World Cancer Day (6th April 1952) when all over the civilised world attention would be focussed on the fight against Cancer, I should be asked to place before you correct facts about the curability of Cancer. I should therefore endeavour to give you as complete an answer as possible on this question with the available knowledge at present. For this purpose, it is necessary to consider the incidence of Cancer among us, its cause, modern methods of treatment and the rate of cure.

In the more advanced Western countries where the expectation of life has greatly improved, Cancer today is the most important single disease. In those countries it has taken second place in the list of causes of death previously occupied by tuberculosis, the first being cardio-vascular and respiratory diseases. It is therefore not reasonable to forecast that in time Cancer will reach the peak as a cause of death in the human race. Sir James Paget half a century ago remarked once to Sir John Bland-Sutton that he was convinced that everyone would die of Cancer, if he or she lived long enough. We need not be taken aback by what Sir James Paget said 50 years ago. That statement was made half a century ago when methods of treatment were not so advanced as now with regard to Cancer. Today the outlook is more optimistic and later on I shall give you the available figures as regards the cure of Cancer and that everybody need not die of Cancer. Another question often asked is whether the incidence of Cancer is on the increase.

Incidence of Cancer

Taking all factors into consideration, such as better awareness on the part of the patient regarding Cancer and early diagnosis, etc., it can be definitely stated that Cancer is of the following types:

Lungs, Brain, Nervous system, Pancreas, Prostate, Rectum, Ovaries, etc.

Cancer is found to be on the decrease in Oesophagus, Liver, Uterus, Lip, Penis and Skin. In a recent analysis of the total number of patients that reported at the General Hospital for treatment during the last 18 months, the following figures are rather revealing:

The total number of patients reported for treatment ..	3,035
Males ..	2,097
Females ..	919
Children (under 12 years) ..	19
Cases that were found to be non-malignant.	45
Cases that were found to be malignant ..	2,990
Cases that were found to be beyond any treatment ..	670
Of these 3,035 patients—	
Cancer of the Mouth ..	1,552
Cancer, Breast ..	244
Cancer, Penis ..	212
Cancer, Nose, Pharynx, Larynx, Maxillary Antrum, Frontal sinus and Tonsils ..	258
Cancer Oesophagus, Stomach, Intestine, Rectum and Anus ..	141
Ulcer ..	141
Soft tissue malignant tumour ..	119
Cancer lymphatic glands including Hodgkin's and Lymphosarcoma and other secondary Carcinomatous conditions ..	115
Other types of Cancers ..	253
Total ..	3,035

Analysis

From these figures, it will be seen that in our country at any rate, the incidence of Cancer in the general population is different from that obtained in the Western countries. Out of 3,000 and odd cases reported for treatment, over 1,500 cases were oral Cancers; about 250 cases were Cancer of the breast; over 200 cases were Cancer of the penis; nearly 150 cases were skin Cancers—this gives us a total of over 2,000 cases of Cancer in these situations. The total number of cases reporting with Cancer of the womb at our Women and Children Hospital is in the neighbourhood of about 1,200 a year. Thus it will be seen that in the accessible parts of the human body, we have over 3,000 cases per year as against a total of about 4,000 of all types of Cancers. Analying this in terms of percentage, fully 75 per cent of the incidence of Cancer is in the accessible parts of the human anatomy. This has a great bearing on the question " Is Cancer Curable ? "

Before going to the question of curability, there is one little snag about the term 'cure' in Cancer. Scientifically speaking, you can say that a certain condition is cured, if you only know the cause. Unless the cause is removed, there could be no meaning in the word cure. Here in this disease, Cancer, we do not know all the causes of Cancer, though we know a good deal about them. Therefore, it would be unscientific to use the word 'cure'

SELF-SUFFICIENCY: The Gokulam Village Training Centre sends up students for Higher Grade Government Technical Examinations. The Centre is run, as far as possible, on a self-sufficiency basis, with only minimum aid from the Government. Cotton towels and silk pieces woven at the Centre were shown to the Minister for Education.

in the ordinary sense as we do with reference to such conditions as a cure in malaria or a cure in dysentery. Since we do not know all the causes of Cancer, it would be unscientific to say that the condition is cured. So, it is but natural that the cure rate should be defined in terms of years, if we are to talk on a scientific level. Thus, in talking about Cancer cure we say the patient is cured for three years, five years, ten years or more.

Natural Expectation of Life

You are all aware that Cancer is largely a disease occurring in men and women after the age of 35, although no age is completely exempt. This in turn naturally leads to another question, that is, what is the natural expectation of life in Cancer at any particular age ? Or otherwise one could ask : "How long would a patient live, if no treatment were given ?" This expectation of life in the patient with Cancer cannot be stated in general or absolute terms. The age incidence and the anatomical site decide the ultimate prognosis owing to the greater virulence of the disease in the young and the natural shorter expectation of life in the old, the type of growth, its easy accessibility for early diagnosis and adequate treatment, its degree of malignancy, its mode of dissemination and its anatomical situation—all these have an important bearing on the expectation of life and therefore on curability.

But it is nevertheless usefu to compare the 'known average' duration of life in the most common type of malignant diseases as the first step in the estimation of curability in the treatment of Cancer. This has been worked out by many workers in the field and it is now estimated that the mean duration of Cancer in certain of the untreated cases are as follows :—

Mean Natural Duration of Cancer.

Stomach	12·2 months.
Colon	8·4 months.
Breast	39·3 months.
Rectum	14·3 months.
Uterus	15·2 months.
Tongue	13·3 months.

This is the average duration of life in a patient when left untreated from the commencement of the disease to death. Therefore, the cure rate in Cancer should be assessed with reference to this expectation of life after the commencement of the treatment.

Modern Methods of Treatment

What are the modern methods of treatment ? They are surgery, Radiotherapy, which includes radium, X-rays and radioactive isotopes, hormonal treatment and lastly chemotharapy.

Either any one of these can be exclusively used or they may be used in suitable combinations, such as surgery with radiation therapy or radiation with hormonal treatment, etc. Apart from the methods suggested by me there is no other known method of scientific treatment for any Cancer.

Let us now analyse the results of these methods of treatment in relation to the types of the Cancer that we commonly come across in the human race—what percentage of each type could be cured under best of conditions.

According to the available statistics, the permanent healing percentage is as follows :—

	Percentage cured in early cases.		*Percentage cured in late cases.*	
Cancer of the breast.	When early	75	Less than	20
Cancer of the womb.	,,	80	,,	10
Cancer of the mouth.	,,	80	,,	20
Cancer of the lip ..	,,	85	,,	10
Cancer of the skin ..	,,	95	,,	30
Cancer of the rectum.	,,	50	,,	0
Cancer of the bladder.	,,	50	,,	0

On a further analysis of a five-year cure from Cancer of the breast in all the stages according to the modern methods of treatment, the following figures are available :

	PER CENT.
Operation only	23
Operation and post-operative irradiation	29
Operation and pre-and post-operative irradiation	40

Two Important Factors

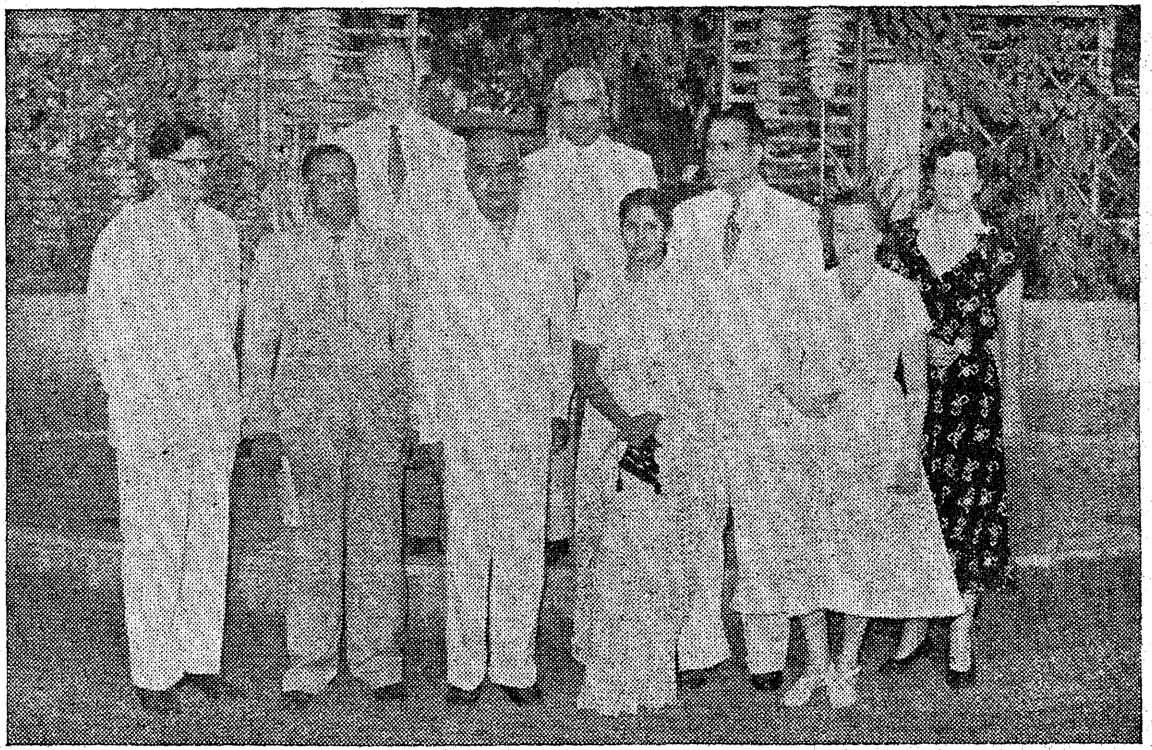
This analysis shows that the prolongation of life with the pre- and post-operative irradiation is nearly double than with surgery along and this percentage is improved by another five per cent by using diathermy knife in place of the ordinary knife. It is therefore seen that the cure of Cancer in the very large majority of cases entirely depends upon two important factors : (1) early diagnosis and (2) adequate and efficient treatment. It is obvious from this that naturally better cure rates are obtained as methods of treatment are more and more specialised. Further, very early diagnosis is easily possible in all those Cancers which occur in accessible parts of the human anatomy and fortunately for us the largest percentage, fully 75 per cent of Cancers at any rate in our country, come under this category. Therefore, if they are diagnosed early and treated properly, over 80 per cent of these should get a permanent cure. If 80 per cent of the commonly occurring Cancers can be cured, it can be said without any fear of contradiction that Cancer is far more curable than either heart or kidney disease.

Unfortunately, there is an impression not only in the minds of the lay public but also among some sections of medical men that Cancer is incurable. This is largely due to the failures of treatment either because the patient reports so late in the stage of the disease when nothing except bare palliation is possible or due to inefficient and inadequate treatment. Therefore, in conclusion, the answer to this question "Is Cancer Curable ?" is a most : emphatic "Yes, if diagnosed early and treated adequately, in the large majority of cases.

(*By Courtesy, A.I.R., Madras*)

Distribution of seeds

The Government have sanctioned a scheme for the multiplication of "Crotalia Striata" seeds at the Agricultural Research Station, Nileshwar, for five years. It is proposed to produce 750 lb. of seed every year for distribution to the cocoanut growers in the East Coast districts.



W.H.O. EXPERTS ADVISE ON MATERNAL AND CHILD-WELFARE SERVICES: Dr. L. R. Tuli, Dr. G. Mettrop, Dr. (Miss) G. Heller and Miss D. Pedersen, Advisers from the Regional Office for South-East Asia of the World Health Organisation, visited Madras at the request of the State Government during the first fortnight of April 1952, to assist the Government in planning the development of Maternal and Child Health Services throughout the State. They were joined by Dr. (Miss) S. Pandit, Maternity and Child Health Adviser of the Directorate-General of Health Services, Government of India, and by Mr. T. G. Davies, Chief of Mission, UNICEF.

After visiting several institutions in Madras City and in the neighbouring districts, the team prepared a draft plan of operations for a Maternal and Child Health Service, in close co-operation with the Director of Medical Services and the Director of Public Health and their staff members.

The plan of operations emphasises the improvement and extension of training facilities for different types of health workers and the development of Maternal and Child Health Services in rural areas. Before leaving Madras for Hyderabad, the team accompanied by the Director of Medical Services and the Director of Public Health paid visits to the Chief Minister and the Minister for Health.

Diagnostic X-Ray Photos Exempted from Sales Tax

The Government have, in modification of their previous orders, directed that diagnostic X-Ray photos be exempted from the levy of Sales Tax. This action has been taken on representations to the Government that radiographs cannot be considered to be finished products, that the radiologists, who are professional men, cannot be considered to be dealers for purposes of the Madras General Sales Tax Act and that they cannot be deemed to buy or sell radiographs.

Best Drama Script on Tree Planting

The Standing Committee on Tree Planting has adjudged the drama script in Malayalam entitled *Mavin Chuvattil* as the best Malayalam script for the competition in drama scripts about tree planting. The author of this script is Sri T. Sankunni Menon, M.A., Viyyur, Tiruchi District, who will be awarded a prize of Rs. 100.

Gifts to Hospitals

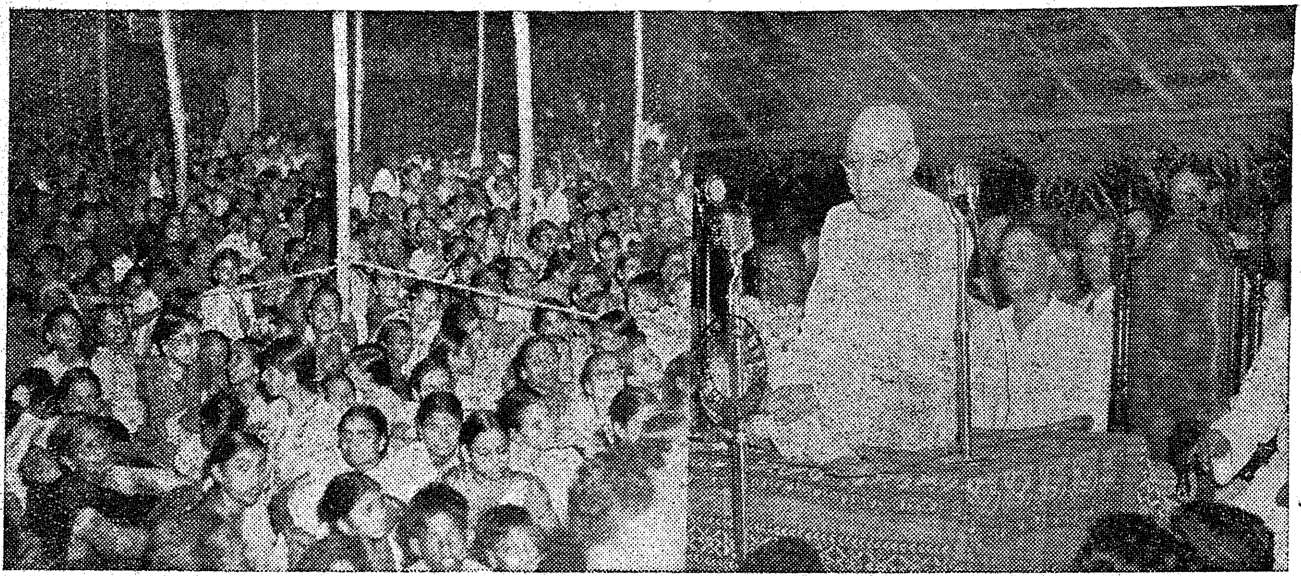
The Government have accepted, with thanks, the offer of a gift by Srimathi Mhetab Bai, Chingleput, of an empty Oxygen cylinder with a complete set of accessories for use in the Government Headquarters Hospital, Chingleput.

The offer of Sri O. S. Konar, Keeranur, to provide electrical fittings to the Government Dispensary, Keeranur, has also been accepted by the Government with thanks.

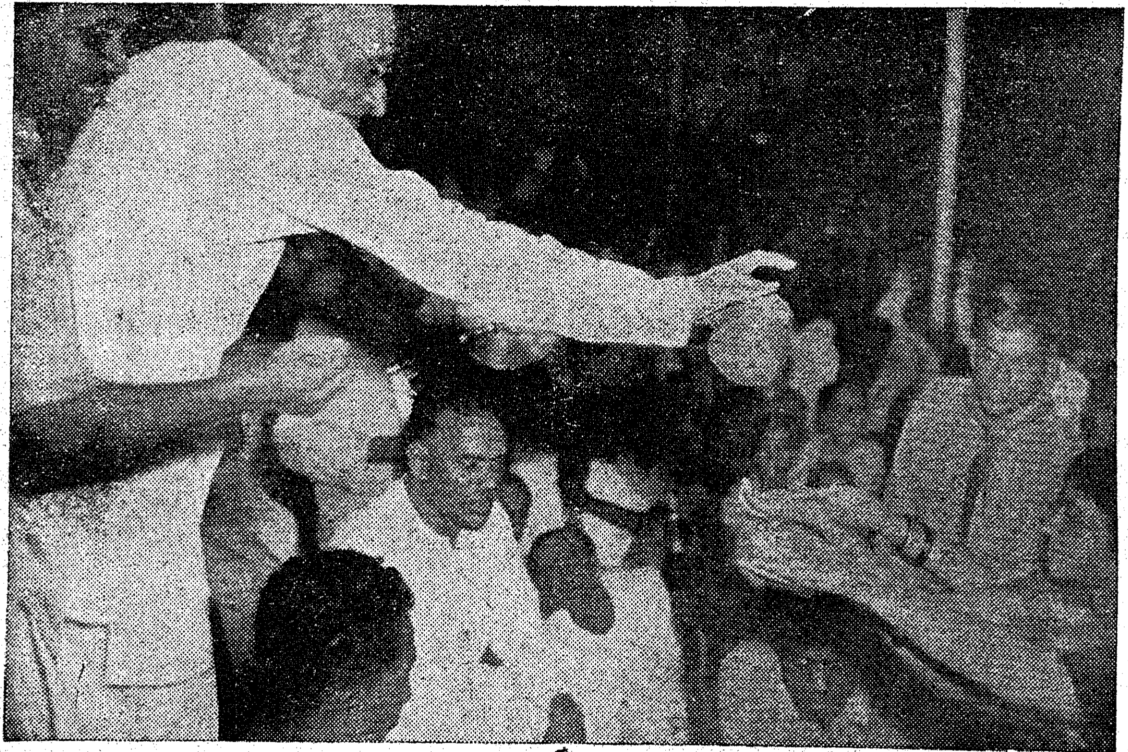
The Government have accepted with thanks the gift of a table grand model H.M.V. Gramophone with a number of records offered by Srimathi Jaya Doraiswami to the Erskine Hospital, Madurai, for the entertainment of the patients.

A gift by Sri Pasupuleti Siddiah, Mica Mine Owner, Gudur, of 20 palliasses and eight bed-side lockers for the use of the Government Hospital, Gudur, has also been accepted by the Government with thanks.

Water Supply for Salem



SALEM WATER-SUPPLY: Hon'ble Sri C. Rajagopalachari, Chief Minister of Madras, recently inaugurated the Salem Water-Supply System. The scheme, though more than 20 years old, was completed only recently, and cost Rs. 40 lakhs. Salem will now get its water-supply from the Cauvery at Mettur

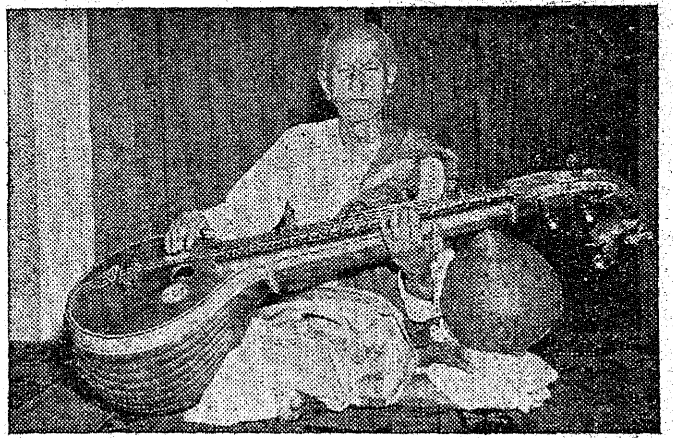


PRECIOUS WATER: At Hasthinampatti, the Chief Minister offered token gifts of the Cauvery water to the women in the audience, who sang a song specially composed for the occasion by the Poet Laureate Sri N. Ramalingam Pillai. The Chief Minister advised the people: "Water is precious. Use it as your would you hard-earned money."

President's Award to Musicians

By Sri C. RAMASUBBAN

Following the Central Government's decision to make four awards every year to distinguished Indian musicians in the four categories, namely, Hindustani (Vocal), Hindustani (Instrumental), Carnatic Music (Vocal) and Carnatic Music (Instrumental), the award in the third and fourth categories this year are in favour of Sri Ariyakudi Ramanuja Iyengar and Sri Karaikudi Sambasiva Iyer, respectively. The award consists of a prize of Rs. 1,000 in cash and a shawl. A special function was held at "Rashtrapathi Bhawan" on March 29, 1952, when the awards were made to the two Vidwans by President Rajendra Prasad.



VEENA : Sri Karaikudi Sambasiva Iyer

Karaikudi Sambasiva Iyer

Sri Karaikudi Sambasiva Iyer is about 65 years old and a native of Thirugokarnam in the Ramanathapuram District. His late brother Karaikudi Subbarama Iyer was a Vainika Vidwan of considerable repute and the two brothers invariably played duet, with the younger (Sambasiva Iyer) always contenting himself to play behind in support of the elder, whom he acknowledged to be his superior. The death of Sri Subbarama Iyer was so great a shock to Sri Sambasiva Iyer that for some considerable time he gave up playing to audiences, and it was feared that the retreat was of a permanent nature. Time, however, helped the younger brother to recover from the anguish and he consented to accept engagements at the All-India Radio at whose stations in Tiruchirappalli and Madras he can be heard broadcasting at regular intervals. Sri Sambasiva Iyer visited Mysore and Travancore, the Rulers of which States honoured him. He has now settled in Madras where he is easily accessible to lovers of music.

Sri Sambasiva Iyer is, in private life, an austere and orthodox Brahman. Simple in habits and religious by temperament, he is always willing to help rising musicians in all possible ways. He has consistently maintained a high standard in accepting engagements, and as his renderings on the Veena are of the "highbrow" type, music lovers with an ear only for the pleasing type of Carnatic music are not likely to be very familiar with his technique.

The Technique of Veena

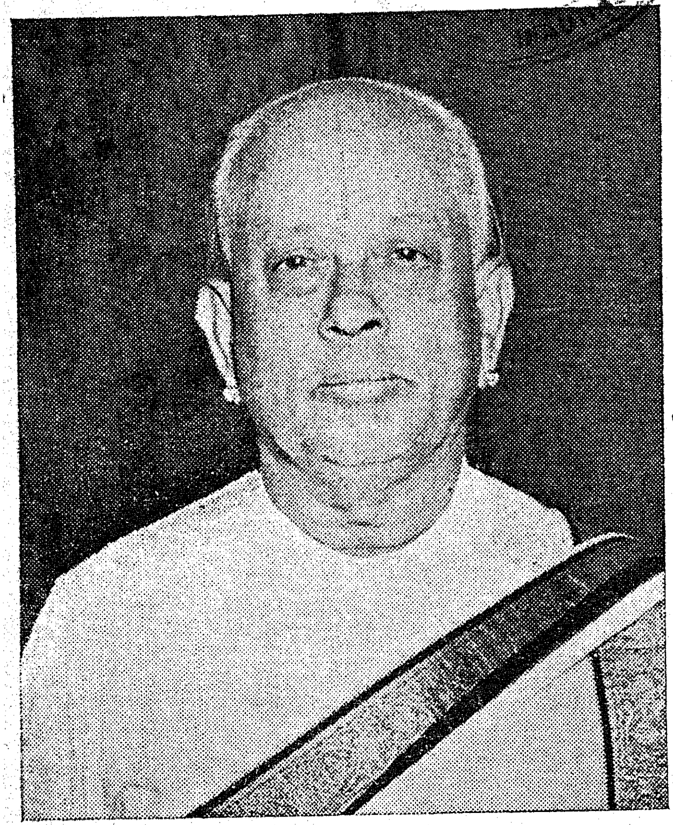
The Veena is an extremely difficult instrument to master, although it lends itself to limitless possibilities in the exposition of Carnatic music. In handling the instrument, there have been two ways, (1) the Andhra way of holding it vertically, and (2) the Tamil and Carnatic way of holding it horizontally. Sri Subbarama Iyer usually played on the instrument holding it vertically. Sri Sambasiva Iyer, however, adopts the horizontal way. In the words of an ardent admirer of his art, Sri Sambasiva Iyer's technique is essentially masculine, vigorous and ancient. In any case, it would be correct to say that his musical renderings on the instrument are of the authentic and pure type. In *thanam*, *pallavi* and *Samagana*, he renders the instrument superb and makes use of it with full grace and embellishments; the transient shakes which are styled "*rekhy*" are of frequent occurrence, while he is an adept in causing vibrations in the pitch by the least differences of pressure upon the frets. The capabilities of the instrument reach considerable heights in his hands, while the tempo of his renderings is always maintained at scintillating pace.

The honour conferred on Sri Sambasiva Iyer is very well merited. That he is an outstanding representative of the orthodox, incorruptible and pure tradition in Carnatic mus is acknowledged by all music lovers in Madras.

Ariyakudi Ramanuja Iyengar

Sri Ariyakudi Ramanuja Iyengar will be 62 next May. He learnt music from Ramanathapuram Srinivasa Iyengar, better known as Poochi Iyengar, a Vidwan of outstanding repute, whose technique was synonymous with the quintessence of vocal Carnatic music. Sri Ramanuja Iyengar started his career even in his 20th year and had the rare honour at that early age of singing to vast critical audiences in Tanjore, Tiruchirappalli, Madurai and Ramanathapuram Districts, where musical tradition was at its height 30 to 40 years ago. The highest honours available to a Vidwan in Tamil Nad have been conferred on him years ago, and besides being a Sangeetha Kalanidhi of the Madras Music Academy, he also enjoys the enviable title of Sangeetha Ratnakara conferred on him by the public of Madras State. He has all the social graces which go to make a musician acceptable in any society, an excellent sense of humour, capacity to reel off anecdotes and spicy jokes, and a consistent desire to please patrons of music in all possible ways. It would be correct to state that no performance of his was ever a flop even on days when he was not in the best of health. That, of course, was due to the gift of an excellent voice, full and rich in texture, staying power and that indefinable quality called "*karvai*".

It is extremely difficult to find the apt words in English to define the great merits in the technique of a vocal musician—terms like full-throated, resonant, rich, melodious, do not fit in with the descriptive epithets which are



VOCAL : Sri Ariyakudi Ramanuja Iyengar

used in Tamil for describing a man's voice. Sri Ariyakudi Ramanuja Iyengar has that indefinable quality in his voice which makes it intensely musical; he infuses into it the richness and pleasing quality that make it scintillating to vast audiences; he reaches the very top notes with ease and stays there for long periods, making the auditorium full of music. Likewise, he reaches the lowest notes with equal ease. As for his sense of time, "*kalapramanam*," it is artistic beyond measure. It is as true in his renderings in slow tempo as in the fast, and when his tempo is fast he has never been known to skid over the notes or leave them blurred. In singing Ragas, he is extremely clever in emphasising just the individual shades that go to build up the finer aspects of each raga. This cleverness of his is exemplified in his treatment of both the Gana Ragas as of the less ostentatious ones.

Sri Ramanuja Iyengar is probably the oldest among present day vocalists in Carnatic music and has enjoyed top-ranking status for several years. It is in the fitness of things that the Government of India should have chosen to honour him this year. Music lovers in Madras State have reason to be greatly pleased with the wise choice implied in the two awards.

CHILDREN'S ART : The Governor of Madras opened the Children's Art Exhibition in Madras, when entries for the Shankar's Weekly competition were put on display. Shankar (in dark coat), the famous cartoonist, is also seen in the picture.

PRIZE PAINTINGS : A few of the outstanding works at the Children's Art Exhibition. Entries were received from all over the world.

Central Tobacco Committee

The 12th Meeting of the Indian Central Tobacco Committee was held at Madras on March 31, 1952 under the Chairmanship of Sardar Datar Singh, Additional Secretary, Ministry of Food and Agriculture. Among those present were Sri K. N. Kaul, Joint Secretary, Ministry of Commerce and Industry, Sri C. Krishnan, Collector of Central Excise, Madras, Sri M. S. Sivaraman, Director of Agriculture, Madras, Dr. T. G. Shirname, the Agricultural Marketing Adviser to the Government of India, the Director of Agriculture and the Director of Industries and Commerce, Mysore, certain Members of the Parliament and State Legislature and prominent tobacco traders.

Opening the proceedings of the meeting, Sardar Datar Singh outlined the progress made by the Committee during the year under review. He paid tribute to the success of the periodicals published by the Central Tobacco Committee. He referred to the popularity of the monthly journal of the Committee not only in India but also abroad, because foreign marketers were utilising its pages for advertising and its circulation in U.K. and on the Continent was increasing.

Research Stations

Referring to research, Sardar Datar Singh said: "Our research stations are continuing their experiments on a variety of problems intended to improve the quality of the produce and the economic cultivation of tobacco. Encouraging results obtained so far are being confirmed on the farmer's fields. The most economical way of suppressing the unwanted shoots to improve the quality of the leaf, optimum doses of fertilisers, proper rotation and evolution of high quality cigar wrapper tobacco, are some of the outstanding researches being carried out at the various research stations. Practical demonstrations on the improved methods of handling and curing leaves were conducted at Tadikonda and Ongole."

Continuing, he referred to the work of the National Chemical Laboratory, Poona, which has already evolved a method for the economic extraction of nicotine from tobacco waste on commercial basis. "This will effect," he added, "considerable saving of foreign exchange and utilisation of tobacco waste in the country to the tune of many lakhs of rupees." He called the attention of Indian industrialists to these researches so that they might set up factor es for nicotine extractions.

Marketing of Indian Tobacco

Speaking about marketing, Sardar Datar Singh said: "On the marketing side, the Committee's recommendations on the improvement of marketing within the country are under consideration by the State Governments. Auction sales of tobacco have also been introduced for Mangalagiri area by the Government of Madras from this season, and the provisions of the Madras Commercial Crops Market Act have been extended to Tirupur to include tobacco. The Secretary visited Hyderabad and Bombay at the State Government's request to advise them on problems of tobacco. The Bombay Government have taken steps to constitute regional tobacco advisory committees for Charotar and Nipani areas to tackle local marketing problems.

"As regards exports of Indian tobacco, there has been a steady upward trend during the past four years. The exports during 1951 by sea and air alone amounted to 116 million lb. worth about Rs. 16·4 crores, compared with 94 million lb. worth about Rs. 14·7 crores in 1950. Hongkong and Russia showed very great interest in Indian tobacco in 1951. Australia, China, Japan, etc., seem to be interested in our tobacco and enquiries have already been received. The tobacco imports, mainly from dollar areas, have on the other hand declined.

"A good portion of accumulated stocks lying at Continental ports has been cleared by the Sales Officer during his visit to certain Continental countries after his participation in the World Tobacco Congress held at Amsterdam in September 1951. The Sales Officer has made some concrete suggestions for improving our market abroad and these deserve your careful consideration."

Referring to the financial aspects of the Committee's work, he reminded the meeting that the Government of India had not been able for obvious reasons to give grants for three years. The construction of farm buildings for the Central Tobacco Research Institute being essential is under way at an estimated cost of Rs. 5 lakhs. The importance of wrapper tobacco for cigar industry of India cannot be over-emphasised and possibilities of starting the Research Station are being explored in consultation with the Government of West Bengal. "Under these circumstances, the Government of India will be requested to restore the grant and we hope the grant will be continued from this year."

Sardar Datar Singh explained why the proposal to start the redrying plant could not materialise this year. Sufficient steps have been taken to expedite setting it up. The object of the plant is to help the growers, small traders and exporters who do not possess proper facilities for redrying their tobacco in time and at reasonable rates.

Recommendations of the Committee

The Committee decided to transfer to the Government of India the scheme of quality control of tobacco intended for exports and to speed up the erection of its redrying plant at Guntur. For this purpose, an Engineer has been elected. It was also decided to publish a comprehensive Tobacco Directory useful to the traders and growers alike. The Committee urged the Government of India to increase its annual grant and appointed a sub-committee to formulate the Committee's plan of work relating to the improvement of tobacco production and marketing in the order of priority of tobacco production and marketing in the order of priority for the next five years.

It was also decided to draw up the details of the quality and quantity of tobacco available for export for forwarding to the Commerce Ministry for inclusion in their Trade Agreements with foreign Governments. To fix the required percentage of moisture in the leaf, the Committee recommended to the redrying owners to provide moisture testing apparatus in their factories.

India and the Tourist Trade

South-East Asia abounds in places of historical and cultural interest to foreign visitors. As tourism is today one of the major industries in most countries of the world—an important source of foreign exchange and a vital instrument for promoting goodwill and understanding between nations—it is natural that India should take an active interest in developing her own travel trade.

India has an immense wealth of attractions, with a happy blend of antiquity and modernity to offer, an extensive store of ancient art and culture, numerous monumental relics on which is chronicled the story of her civilisation through the ages, a host of industrial centres and seats of learning, and an infinite variety of natural scenery and flora and fauna which would draw the admiration of any traveller from abroad. There is no dearth of beauty-spots and pleasure resorts and opportunities are not lacking for individual tastes, such as big game hunting, boating and picknicking. The weather is delightful in all parts of the country for some months, and in others all the year round.

The Government of India are paying considerable attention to giving an impetus to developing tourism, particularly to attracting foreign visitors. Their broad objective is to organise publicity in foreign countries and to ensure that visitors from abroad are provided all possible comfort during their sojourn in India.

Government Organisation

The Central Government have accordingly set up a tourist traffic organisation under the Ministry of Transport. Regional tourist offices have been established in important cities like Delhi, Bombay, Calcutta and Madras. In addition, the State Governments of the Punjab, U.P., Rajastan, Mysore, Travancore-Cochin, Hyderabad, Orissa and Jammu and Kashmir have each placed at the disposal of the Government of India an honorary regional tourist officer with a view to ensuring satisfactory liaison. Thus, India has now a well-knit network of tourist offices working in close collaboration with the State Governments, travel agents, hoteliers and carriers. With a view to encouraging tourist traffic from America, Government have decided to open a tourist bureau in New York.

Besides furnishing all the necessary information about amenities to tourists and rendering them any special assistance they may require in obtaining visas and permits, the Regional Tourist Officers of the Central Government help in supplementing the task of recognised travel agencies. They are also entrusted with the responsibility of ensuring that tourist facilities are improved and brought up to the requisite standard. Advisory committees are now being gradually attached to them to assist them in their day-to-day work.

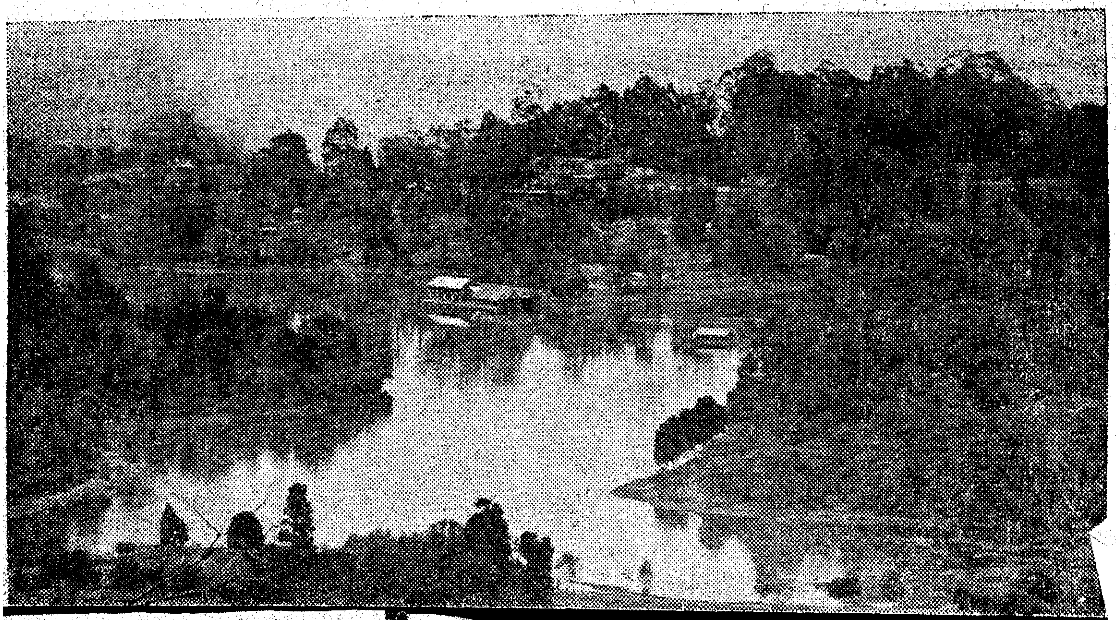
Relaxation of Regulations

With the help of the Central Tourist Traffic, Advisory Committees, an organisation consisting of representatives of the Central Government, the State Governments and other trades directly interested in the promotion of tourist traffic, the Transport Ministry, in co-operation with the Central Ministries and the State Governments concerned, has been able to arrange relaxation of various governmental regulations regarding simplification of registration and customs formalities and currency exchange.

All overseas tourists are now provided with an 'Introduction Card' which enables them to seek the help of Government officials in getting essential facilities. The Railway Administration have provided air-conditioned coaches on most of the main railway routes. Comfortable tourist cars are also made available on demand.

There are at present fairly good western-style hotels in almost all the principal cities and towns in India. With a view to improving the standard of hotels, Government have encouraged the formation of regional associations of

KODAI: The restful serenity of the Lake at Kodaikanal has an enternal appeal for visitors seeking a quiet vacation



hotels and restaurants. Leading hotels have agreed to make priority reservations, while the State Governments have thrown open their dak bungalows and rest houses at tourist centres for the use of foreign travellers on payment of the usual rent.

Publicity Literature

A booklet entitled *India—Tourist Information*, regional guides on Kashmir, Hyderabad and Travancore-Cochin and an illustrated *Handbook of India* have been published. Folders and posters on key tourist centres have also been brought out, while shikar and shopping guides are under print. A pictorial map of India has been especially prepared and its copies circulated abroad.

Arrangements have been made for the production of suitable travel films on India in colour for non-commercial distribution abroad, and some of these have already been released.

The influx of tourists to India has been very encouraging indeed. A large number of tourists, among them well-known writers, poets, journalists, professors, technical experts and leaders of opinion, have been to India from all corners of the world, not only for holidaying or sight-seeing but also to study our culture and way of life, to meet the common man and exchange views with the intelligentsia. The luxury liners *Caronia* and *Stella Polaris* brought to India large parties of Americans on a pleasure cruise last year as well as this season.

It was in 1950 that India joined the International Union of Official Travel Organisations, which is a non-governmental body with a consultative status with the U.N.O. Indian delegates to the various sessions of ECAFE and IUOTO have played a notable part in the setting up of the Asian and Far Eastern Regional Commission on the lines of similar commissions for Europe and Africa. It is a matter of honour that India has been selected as the venue of the first meeting of this Commission.

Bharathi's Songs

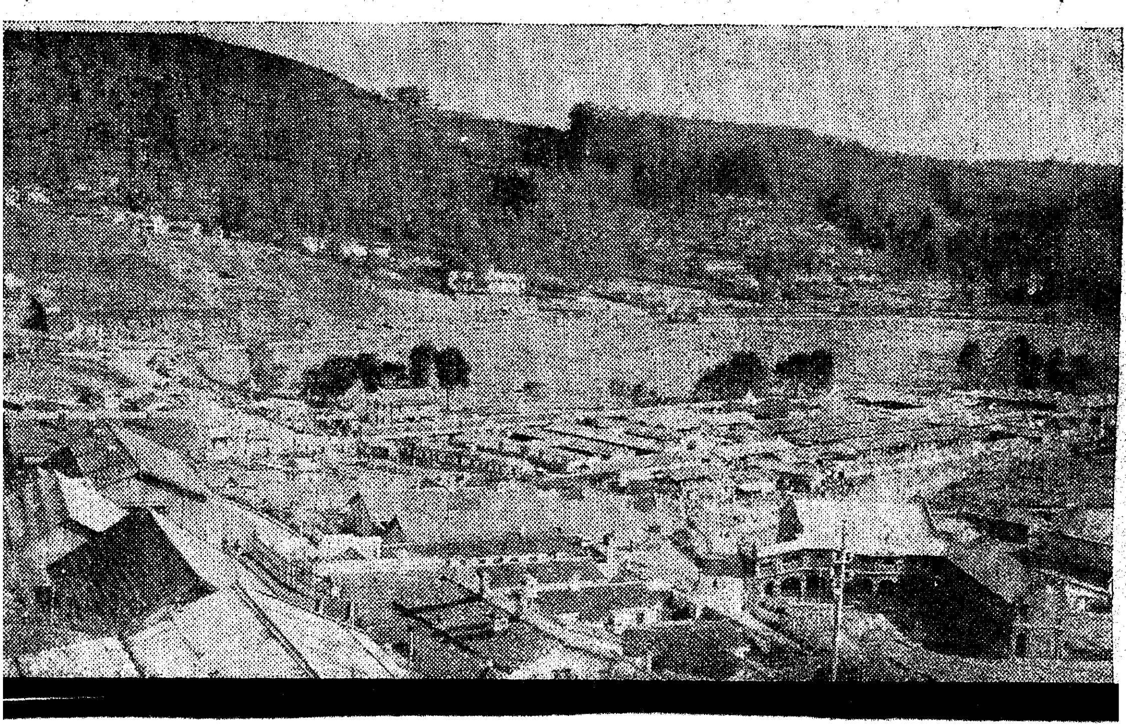
The Government understand that the songs of the late C. Subramanya Bharathi, the Tamil poet, are being reproduced in cinema films and on gramophone records without the prior permission of Government, despite the fact that the copyright in respect of the works of the poet has been acquired by the Madras Government. The Government wish to make it clear that normally there will be no difficulty in obtaining such permission, subject to the payment of royalty to the Government at the following rates :—

Rs. 200 for the reproduction of one song in a cinema film ; and $2\frac{1}{2}$ per cent of the sale price of a gramophone record which reproduces a song.

Similarly, publishers of text-books for schools or others who desire to include any poem, or extract from the works of the poet in their publications, will ordinarily be permitted to include the matter in their publications on payment of a royalty of annas four for a line, subject to a minimum of Rs. 5 for each poem or extract. But prior permission should be obtained from Government in each case.

Those desirous of obtaining the permission of the Government for reproduction of the songs or other works of the poet, or extracts from them, should apply to the Secretary to the Government of Madras, Education Department, Fort St. George.

OOTY: A general view of Ootacamund, one of the premier hill stations in Madras State



Drought Battle in Cyprus

Of the 450,000 inhabitants of Cyprus, some 355,000 live in rural areas. Most of them are agriculturists and agriculture depends on irrigation. Because of the physical features of the country it is necessary to irrigate all lands used for cultivation. The indiscriminate destruction of wood lands led to increased erosion and lessened the water conservancy of the areas. The flow in the rivers became more spasmodic and seasonal rains have lost their usefulness in preventing droughts.

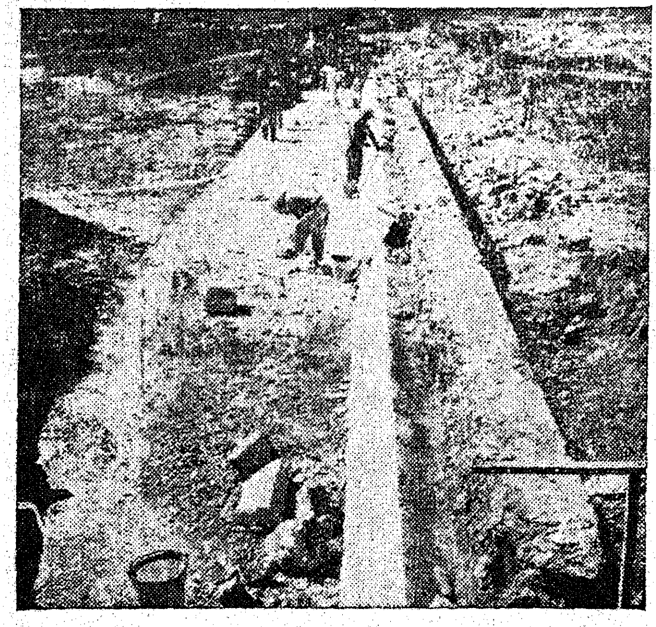
In 1939, the Water-supply and Irrigation Department was formed. More than a quarter million pounds are being spent by the Government on bringing badly-eroded lands back into cultivation, road repairs, anti-flood constructions and tree-plantings.

These pictures show what is being done in a typical village, Palekythro near Kythrea, where nearly £7,000 are being spent on a relief scheme which will make possible the flood water irrigation of about 234 acres of land this season.

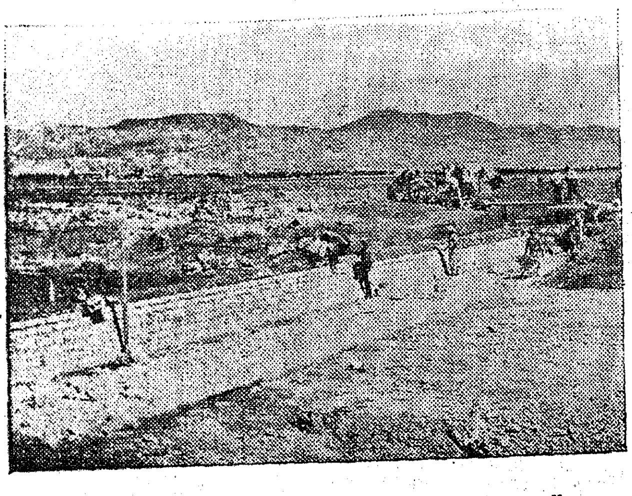
Along the bed of the river, a tributary of the Pedieos, the Water-Supply and Irrigation Department is building a 150 feet masonry spillway six feet high with earth embankments on either side. The in-take channel is designed to carry 4,000,000 gallons of water a day into the surrounding distribution system of earth channels.

Another 66 acres of land, now a chain of useless gulleys, will also be made fertile by this scheme.

This combined irrigation and soil conservation project is providing work for men from neighbouring villages who are speeding up their efforts, realising what it will mean to them.



CLOSE-UP OF THE DAM WALL: The 150 feet dam wall at Palekythro, near Kythrea, part of a scheme which the Cyprus Government is carrying out to combat the drought damage.



DIVERTING THE WINTER RAIN: Cyprus is still suffering from the effects of its most serious drought for 20 years. This picture shows work going on at a dam near Kythrea, where a Government irrigation and soil conservation project is expected to divert the winter's rain on to surrounding eroded land and restore its fertility.

Irrigation Works Sanctioned

During the week ending April 5, 1952, the Government have sanctioned at an estimated cost of Rs. 16,98,000 for works or Rs. 17,15,257 inclusive of direct and indirect charges, the scheme for the formation of a reservoir on the Vattamalai stream near Vattamalai Hill temple, situated a little to the west of Dharapuram-Kangayam road between the 39th and 40th milestones, in Dharapuram Taluk, Coimbatore District.

The reservoir is expected to impound 90 million cubic feet of water by 1¼ fillings. Two channels will take off from the two tower-head sluices at either end of the dam to irrigate 450 acres of cotton and 450 acres of millets both in Dharapuram Taluk. The scheme, besides increasing food production of fodder crop, will raise the level of the water table in the surrounding areas of deepening wells, running gruel kitchens, providing famine relief works, etc. The scheme has been ordered to be taken up for execution immediately, in view of the conditions in the district.

The Government have also sanctioned the immediate execution of the earth work relating to the canal portion of the Lower Sagileru Project, Badvel Taluk, Cuddapah District, as a famine relief measure.

Minimum Wages In Mica Works

The Government have specified the minimum rates of wages for different classes of employees in any Mica works. The rates will come into effect from March 25, 1952. The employees covered by these ordered are those working in the Mica Mining Section, the daily paid temporary employees in the Mica Factories Section and the monthly paid employees in the Mica Mining and Factories Sections.

Rehabilitation of Rayalaseema

By SRI B. JOOGAPPA, M.A., I.A.S., Development Commissioner, Rayalaseema Development Board.

The five central Deccan districts, viz., Anantapur, Bellary, Chittoor, Cuddapah and Kurnool, well known as the Rayalaseema after the Rayas of the Vizianag r Empire, which extended up to Visakhapatnam in the north and Madurai in the south and attained in the 15th century unique splendour and glory during the reign of Krishnadeva Raya the Great, whose capital and court at Vizianagaram (Hampi) attracted many foreign travellers and historians who found and hailed this country as a land of plenty and prosperity under the great Rayas, is now a backward tract and a famine zone due to political upheavals and wars, vicissitudes of times and seasons, decay and dereliction of Irrigation sources, ravages of periodic famines and consequent distress, despondency and despair of the people. Even to this day, however, the famous and sacred shrines of Srisailam, Hampi, Virupaksham, Ahobilam, Kalahasti and Tirupathi in the Rayalaseema attract large crowds of pilgrims from all over India.

The authors of the Gazetteers have rightly observed that the ryots of Rayalaseema, before they emerge from one famine are engulfed by another. Owing to uncertain monsoons and inadequate rainfall, decay and dereliction of tanks and Irrigation sources and want of adequate protective Irrigation works, this area is subject to periodical visitations of famine. During the last quarter of the century, there has been on an average a famine for every third or fourth year, a fact which is conclusive evidence of the deplorable conditions of the tract. The expenditure incurred on Famine Relief works in the past has gone up to several crores. The loss sustained by the people should be much more and beyond estimate. To arrest these distressing conditions, to afford protection and rehabilitate the agriculturists to develop the inexaustible mineral wealth and to develop large and small scale industries, an Economic Development Advisory Board was constituted by the Government in 1941 as recommended by the Famine Code Revision Committee.

As the achievements of this Advisory Board with its limitations were not substantial, the Rayalaseema Development Board was constituted in 1949 with the Hon'ble Minister in charge of Rayalaseema Development as Chairman and Heads of Departments, officials, Legislators, and non-officials as Members and a Development Commissioner, appointed as its Secretary, to examine and co-ordinate several schemes for the rapid development f Rayalaseema. The Rayalaseema Development Board has endeavoured to do its utmost for the development of Irrigation Projects, large scale and small scale industries, Electric Power, etc., on which I shall briefly dwell hereafter. The term of the Board was for two years in the first instance. The Government have since extended the life of the Board for a further period of three years up to 1952 as this Board has a continuing responsibility till the people of this area are rehabilitated on sound economic lines and brought on a level with the rest of the State.

The Members of the Board are :—

1. Sri B. Ananthachari, Hospet.
2. Sri T. Subramaniam, President, District Congress Committee, Bellary.
3. Sri Kallur Subba Rao, Hindupur.
4. Sri P. Lakshmayya, Anantapur.
5. Sri N. Venkatasubbaiah, Nandyal.
6. Sri M. Subba Reddi, Nandyal.
7. Sri K. B. Narayana Reddi, Proddatur.
8. Sri P. Parthasarathi, Kodur.
9. Sri R. Nadamuni Reddi, Narasingapuram, Chittoor.
10. Sri T. K. T. Veeraraghavachar, Chittoor.
11. Sri R. Suryanarayana Rao, Madras.
12. Late Sri T. A. Ramalingam Chettiar, Coimbatore.
13. Sri Kala Venkata Rao, Ex-Secretary, All India Congress Committee.
14. The Superintending Engineer, Anantapur.
15. The Registrar of Co-operative Societies.
16. The Director of Industries and Commerce.
17. The Director of Agriculture.
18. Development Commissioner as its Secretary.

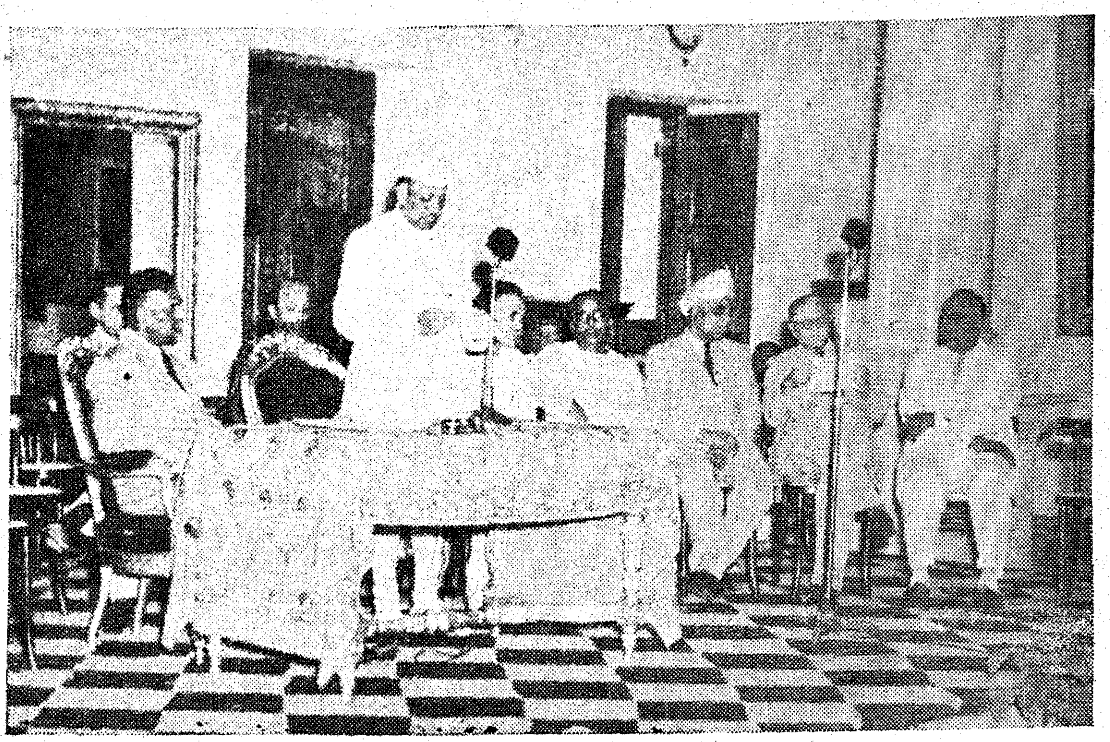
The Board held nine meetings till now. I shall now give a brief account of the work done by the Board.

Irrigation Projects.—The Board has concentrated its attention chiefly on Irrigation Projects. The people of Rayalaseema have been agitating for the early execution of all the conceivable Irrigation Projects, repair of tanks and supply channels. The Board has examined all the schemes which have been sent up by the Members and the public and have recommended the execution of such schemes as are beneficial and feasible.

Tungabhadrd Project.—The Tungabhadra Project which is likely to be completed by 1953 is the biggest in Rayalaseema and is estimated to cost Rs. 17 crores. The Low Level Canal of this Project will irrigate an area of 58,000 acres of wet lands and 1,92,000 acres of dry lands in the districts of Bellary and Kurnool. As this Project has been designed with a High Level Sluice which is under construction, this Board urged upon the Government to give top priority and include in the Five-Year Plan the High Level Canal Scheme to receive water for wet crops in Bellary and Anantapur districts. The Tungabhadra Project when it come into beneficial use, with its Low Level and High Level Canals will give adequate protection to the people from famine and will also provide them with cheap electric power, as this Project will develop to start with 23,500 K.W. reaching finally 45,000 K.W. of power.

Pennar-Kumudavathi Project.—The Pennar-Kumudavathi Project which was under contemplation for a long time has been sanctioned at a cost of Rs. 19,60,000. It will augment supply to rainfed tanks in Hindupur taluk and will irrigate 3,130 acres.

Broadcast talk on the 5th April 1952 from the All India Radio, Madras, on " Development Schemes and Relief Measures in Rayalaseema ", by Sri B. Joogappa, M.A., I.A.S., Development Commissioner, Rayalaseema Development Board, Madras.



RAYALASEEMA RELIEF : H.E. Shri Sri Prakasa, Governor of Madras, addresses the meeting convened by the Sheriff of Madras to start the Madras State Famine Relief Fund, to relieve distress in stricken Rayalaseema

Upper Pennar Project.—The Upper Pennar Project sanctioned at a cost of Rs. 84 lakhs to irrigate about 6,000 acres in Dharmavaram and Kalyandrug taluks of Anantapur district is in rapid progress.

Bhairavanithippa Project.—It has been sanctioned at a cost of Rs. 82 lakhs to irrigate 8,000 acres in Kalyandrug and Rayadrug taluks. I visited the project site and pressed for its early execution. The foundation stone for this Project was laid by Sri M. Bhaktavatsalam, former Minister for Public Works on 28th December 1951 when there was a mammoth gathering of the eager and enthusiastic ryots of the area, over which Sri H. Sitharama Reddi presided.

Lower Saligileru Project.—The Board recommended the immediate sanction and execution of the Lower Sagileru Project in Cuddapah district as a Famine Relief work, and this has been accepted by Government. This will help to relieve the distress among the labouring class in Badvel taluk. The scheme envisages the supply of water to Badvel and nine other tanks, providing irrigation facilities to 3,000 acres.

Gandikottah Project.—The Board has also recommended the immediate sanction and execution of the Gandikottah Project, Swarnamukhi Project, Kalyani Reservoir Scheme, Bheemanadi Reservoir, etc. At the instance of this Board, the Government have sanctioned Small Tank Schemes for the reclamation of small tanks with an ayacut of below 25 acres in the Rayalaseema area.

Agriculture.—The schemes for the purchase of 40 tractors and allied equipment and the establishment of a Tractor Workshop at Bellary for the speedy development of the Tungabhadra Project, and the schemes to offset the labour shortage by mechanisation and for the reclamation of weed-infested lands recommended by the Board are under Government's consideration.

Soil Conservation Scheme.—The Soil Conservation Scheme by Contour Bunding which will increase production by 25 per cent is under execution over an area of 4,800 acres in Alur, Nagari and Guntakal centres. The Board has further recommended the extension of the Scheme to the other areas as this is quite suitable for being taken up as Famine Relief work.

One hundred and forty-two oil engines and 25 motors pumpsets have been sanctioned and 53 tractors with matched implements are working in ploughing and levelling operations, under the G.M.F. Scheme. The Fruit Canning Factory at Kodur will commence production; arrangements have been made for the supply of an Electrical Generator.

Afforestation.—All the areas which are liable for sand dunes on the banks of Hagari have now been planted. Similar plantations on the banks of Pennar are now in progress. The Board's proposals to raise village forests on the river banks on assessed and unassessed lands not fit for cultivation for food crops are under Government's consideration.

Animal Husbandry.—The establishment of the Key Village Scheme in a few centres for the improvement of milch and drought cattle is in progress. The Board's proposals for developing the Sheep Farm at Kurakuppi into a combined Cattle and Dairy Farm, and the establishment of a Livestock Farm at Nandyal in Kurnool district, are under Government's consideration. The establishment of a Cattle Farm at Munidram in Chottoor district which will serve Chittoor, Salem and North Arcot will be taken up for consideration as a Part II Scheme for 1953–54.

Rural Water-supply.—As the scarcity of drinking water in many villages is very acute, the Board has recommended to Government to take special steps for efficient and speedy execution and to sanction special allotment of funds.

Protected Water-supply.—The Board has also recommended to Government the immediate sanction and speedy execution of several protected water-supply schemes to the major towns like Chittoor, Tirupathi, Guntakkal, Tadpatri, Dharmavaram and Penukonda.

Communications.—Recognising the urgency of developing communications for the speedy development of Rayalaseema, the Board has urged for full grants for all the District Board roads and recommended the transfer of all the major district roads and the famine roads in the Project area to the Highways Department for proper maintenance, and black topping of the roads passing through towns and villages, to protect the people from the nuisance of diseases and dust.

Electricity.—As the Tungabhadra Hydro-Electric Power will not be available earlier than 1954–55, arrangements have been made to obtain from the Mysore Government 4,000 K.W. of power for a period of seven years from the Jog Scheme at a cost of Rs. 76 lakhs. The Board is taking action to accelerate the execution of the schemes for the utilisation of power. Installation of a Thermal Station at Madanapalle and a Diesel Station at Penukonda are under investigation. The Thermal Stations at Nandyal and Tadpatri have been completed and power is being supplied. As recommended by this Board, the advance construction of the transmission lines from Anantapur to Gooty, Anantapur to Dharmavaram, Adoni to Yemmiganur, Cuddapah to Kodur, Kottur to Harpanahalli for the supply of power from the Tungabhadra Hydro-Electric Scheme are unde progress.

Industries.—The Hon'ble Pandit Jawaharlal Nehru, Prime Minister of India, laid the foundation stone of the Madras Co-operative Spinning Mills, Ltd., at Guntakkal on the 26th December 1951, which is the only co-operative spinning mill in India. The Board has recommended the establishment of paint and lithophone factories in Guntakkal and Vempalli as State concerns and the establishment of a cement factory in Kurnool District which is sponsored by Sri V. Ramakrishna, I.C.S. (Retired).

Remission of Land Revenue in Pudukottai

The Government have sanctioned wet remission, on the scales indicated below, for Fasli 1361 in the taluks of Alangudi, Tirumayam and Kolathur in Pudukottai Division of Tiruchirappalli District, which have been affected by adverse seasonal conditions :—

Full remission for wet lands with an outturn of four annas and below ; no remission for wet lands with an outturn of above four annas.

All wet lands, on which, owing to inadequacy of water, a successful dry crop has been raised, will be eligible for the remission of the difference between the wet and dry assessment. Wet lands left waste owing to lack of supply in the irrigation sources, are eligible for full remission, except for manual wastes, in reckoning which, however, the three previous faslies would be excluded.

Current wastes on dry lands, i.e., lands which are not mamul wastes, will also be eligible for remission. The Government have also directed that the collection of loan instalments and summary recovery of loans in all the three affected taluks of Alangudi, Tirumayam and Kolathur in Pudukottai Division be postponed to Fasli 1362.

Madras State Famine Relief Fund

The existence of acute distress in some of the districts of the Madras State, particularly in Rayalaseema, consequent on the failure of the monsoon for the last five years, is too well known to require any further publicity. Government are doing their utmost to relieve the distress, but in addition to this, it is necessary to mobilise all available private philanthropy so that Government assistance may be supplemented by private charity. It was with this object in view that the Sheriff of Madras convened a public meeting on the 27th March 1952, at which His Excellency the Governor of Madras presided. An influential committee of non-officials and officials has been formed to collect donations and so far a sum of Rs. 2,31,931-2-0 has been collected. Donations are being received every day and it is proposed to publish a daily list of collections in the Press.

The Secretary and Treasurer of the Imperial Bank of India, Madras, is the Honorary Treasurer of the Fund and all the donations intended for the Madras State Famine Relief Fund may be made payable to "The Honorary Treasurer, Madras State Famine Relief Fund at the Imperial Bank of India, First Line Beach, Madras."

It is desired to bring prominently to the notice of philanthropic citizens that the Government of India have acceded to the request of the Madras Government and exempted all contributions that may be made to the Madras State Famine Relief Fund from payment of income-tax. Receipts for all donations will be furnished by the Honorary Treasurer and any correspondence in connexion with the Fund will be attended to by the Secretary who is also Deputy Secretary, Revenue Department, Government of Madras.

It is intended that donations received should be utilised on all ameliorative objects supplementary to the works undertaken by the Government in the famine affected areas. Steps are being taken to form District Committees in the mofussil with the Collector as Chairman.

An Oil Technological Institution has been established at Anantapur to impart training and carry out research in Oil Technology.

A certificate Course in Automobile Servicing has been introduced at the instance of this Board in the Rayalaseema Polytechnic, Bellary. For the development of Cottage Industries, the Board has recommended the starting of six peripatetic spinning and weaving parties to develop cottage wool industries and also the introduction of Sir M. Visveswarayya's Industrialisation Scheme.

The Board has also urged that more land colonisation scheme in the Rayalaseema should be taken up. At the instance of the Board, one of the Community Project Centres under the Indo-American Programme has been allotted to the Cuddapah-Kurnool Canal Zone, for the integrated development of the area at a cost of one crore of rupees.

Famine Relief.—It is most unfortunate that there has been a failure of both the monsoons in the fifth year in succession in the Rayalaseema excepting Bellary District. The Collectors submitted special reports for granting remission and starting Departmental Works, etc. The Members of the Board of Revenue, after inspection of the affected areas, recommended grant of remissions on liberal scale, grant of takkavi loans, subsistence loans, fodder loans, and also the sanction of minor irrigation, R.W.S. Tank Improvement Schemes, District Board and Post-War Road Works to provide employment to the labourers. Accompanying the First Member, Board of Revenue, I have also toured the famine affected areas. Government have granted a remission of about 19 lakhs of rupees in the four districts of Cuddapah, Anantapur, Kurnool and Chittoor and collection of instalments of takkavi loans. Government have also ordered the postponement of recovery of subsidies granted for wells.

The Hon'ble Sri K. M. Munshi accompanied by Sri H. Sitharama Reddi and Sri J. L. P. Roche Victoria, visited some of the affected villages. His Excellency the Governor of Madras, no sooner had he assumed his high office, toured the affected areas to gain a firsthand knowledge of the distress and as you all know, the Madras State Famine Relief Fund was constituted at the Sheriff's Meeting held on 27th March 1952 over which His Excellency presided and exhorted the public to render immediate help to the distressed people. The people of Rayalaseema are very grateful to His Excellency and the Government for having taken all possible steps to mitigate the suffering of the famine stricken people and to provide employment to the labourers.

It is roughly estimated that the cost of these Famine Relief measures may go up to six crores of rupees. So far, the Government have sanctioned 40 lakhs of rupees under takkavi loans, 8½ lakhs under subsistence loans, 6 lakhs for interest free loans for the improvement of irrigation wells, 19 lakhs under rural water-supply, Rs. 30,74,000 for gruel centres. Full grants have been given to the District Boards for taking up road works. Special staff of Assistant Engineers and Supervisors for the execution of these works has been sanctioned for each district. Special Tahsildars and Revenue Inspectors have been sanctioned for the speedy distribution of takkavi and subsistance loans. A good number of irrigation works such as repairs to supply channels, M.I. Tanks, village roads, road works etc., have been taken up to provide labour for the unemployed. At present more than 40,000 persons are employed on all these works. The Government have authorised the Collectors to sanction the execution of any other work as and when necessary in anticipation of Government orders. Order have been issued to see that the minimum average daily wages is not less than Re. 1 per man and annas 12 per woman and continuous employment is provided.

Gruel Centres have been started wherever necessary to provide *Amballi* (gruel) for old destitutes, children, etc. There are more than 500 Gruel Centres and the average daily attendance is over 10,000 per day.

As scarcity of drinking water is very acute in some villages, all wells in the villages are being deepened. Eighteen lorries have been supplying water in drums to the villages where drinking water is not available. The Government of India have deputed Army Engineers to survey the possibilities of digging new wells and to deepen the existing wells in this area.

Fodder.—The scarcity of fodder is very acute in some areas; 1,500 tons of hillgrass is being transported to the affected areas and fodder depots have been opened in central villages. To purchase 1,000 tons of paddy straw, a special officer has been sent to East Godavari for despatching it quickly. Hillgrass has already been moved to some of the affected areas and is being sold to the ryots at subsidised rates. Reserved forests have been thrown open in all these areas for grazing. In Chittoor District about 10,000 cattle have been permitted to be penned at the pentas in the reserved forests. Government have sanctioned 6,000 rupees for the repairs of cattle water pentas.

Government have authorised the Collector of Bellary to constitute committees for the collection of free gifts of fodder and grains for transporting them to the affected areas. Similar instructions are being issued to the Collectors of delta districts also. The people of Rayalaseema are very grateful to the public organisations and social service associations for having organised famine relief measures in addition to Government relief measures. In the face of deepening calamity of famine, I exhort the people of Rayalaseema to develop their united strength of self-help to fight and end this famine once and for all by pooling and bending their energies and forming themselves into Voluntary Corps of Land Armies for reclaiming waste lands, repairing and developing irrigation sources and agriculture. Let us earnestly pray and fervently hope that Providence will soon bless these famine-stricken areas with His Divine Grace of torrential and timely rains and that irrigation projects, major and minor which are under construction and repair, will soon come into beneficial use and that this will be the last famine in the State. Jai Hind!

(*By Courtesy A.I.R., Madras*)

Tanning Pits For Chucklers

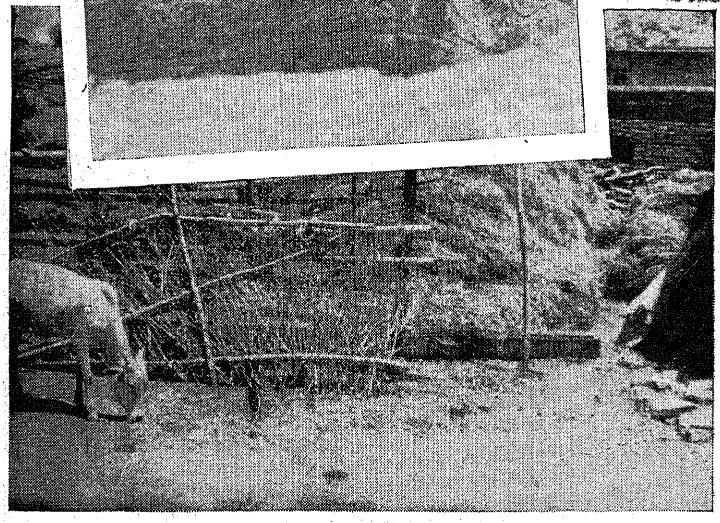
The Government have sanctioned the proposal to provide tannery pits to the chucklers free of cost, wherever necessary, as in the case of house-sites. The site will be located at a distance of four furlongs from the village and selected in consultation with the health authorities. The area of each pit will ordinarily be 40 feet by 20 feet for five tanners.

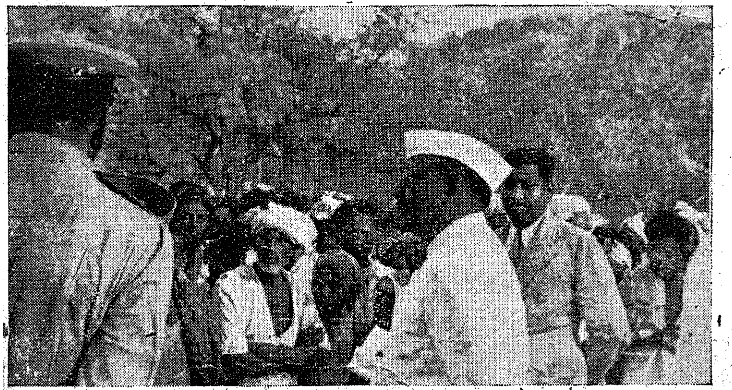
H. E. THE GOVERNOR TOURS RAYALASEEMA

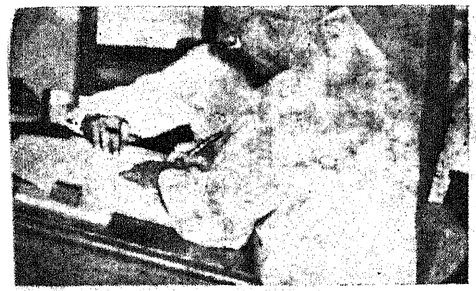
H.E. Shri Sri Prakasa recently toured the stricken areas of Rayalaseema. Highlights of his inspection are presented below.

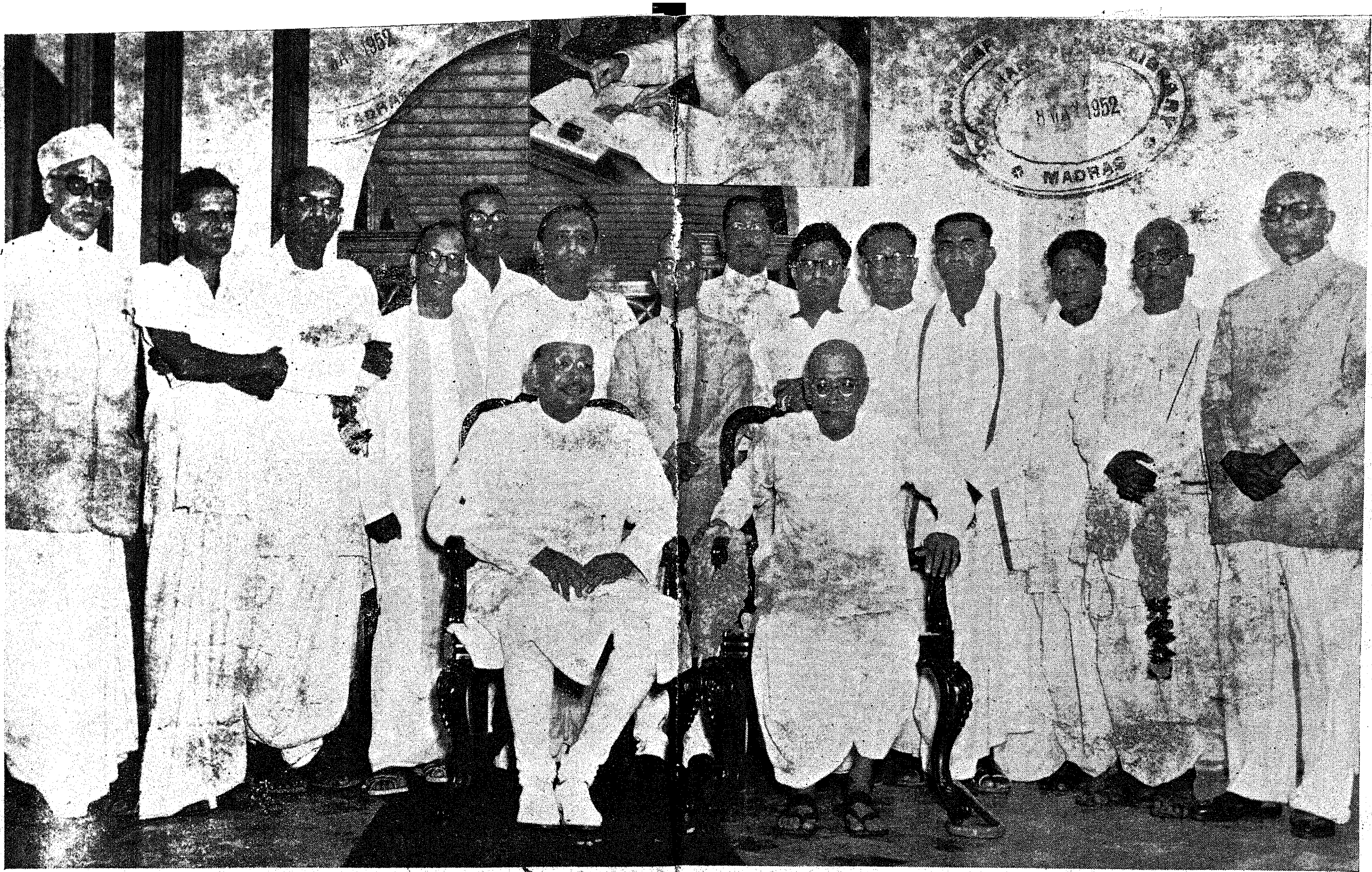
Left: 1. H.E. the Governor inspects a well in Marsapet, Rayachoti Taluk (Cuddapah District). 2. A fodder depot at Chilapantha near Lepakshi, Hindupur Taluk (Anantapur District). 3. H.E. meets villagers. 4. The Kunali Canal in Tadpatri Taluk, a famine relief work.

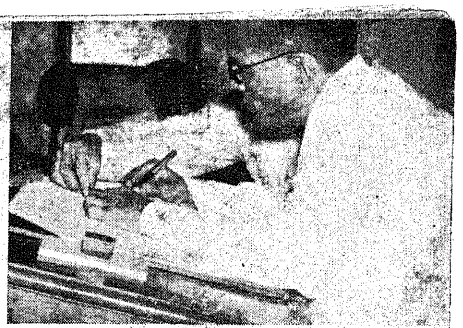
Right: 1 and 2. A gruel centre at Guvvalacheruvu, Rayachoti Taluk (Cuddapah District). 3. A famine relief work in progress.

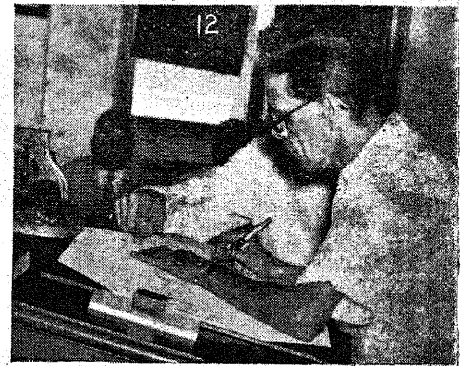


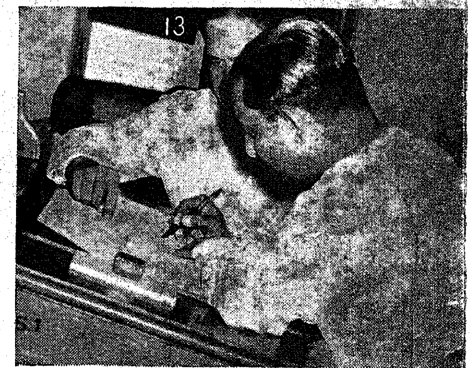


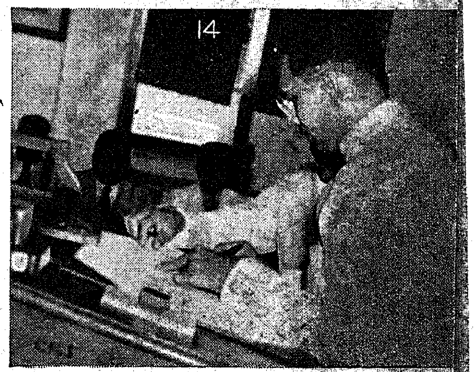








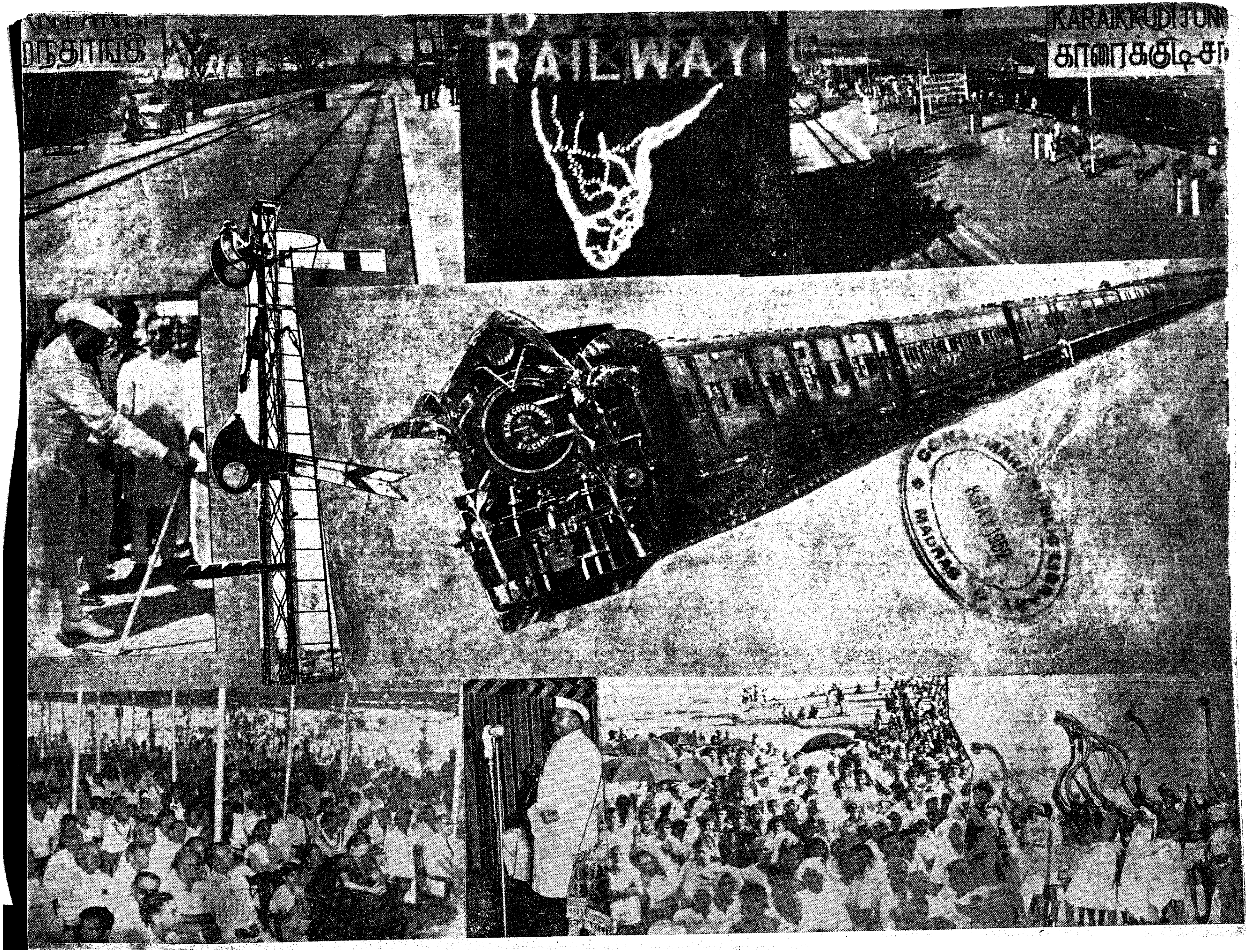




NEW MINISTR TAKES OVER

Sri C. Rajagopalachari heads the new 15-member Cabinet in Madras State. The new Ministers are seen here standing, with H. E. the Governor and the Chief Minister sitting. *From left to right*: Sriyuts K. Venkataswami Naidu, K. P. Kuttikrishnan Nair, N. Sankara Reddi, M. A. Manickavelu Naicker, Dr. R. Naganna Goud, Raja Sri Shanmuga Rajeswara Sethupathi, Dr. U. Krishna Rao, S. B. P. Pattabhirama R, C. Subramaniam, V. C. Palaniswami Gounder, N. Ranga Reddi, D. Sanjeevayya, Dr. M. V. Krishna Rao, A. B. Shetty.

THE SWEARING-IN: (1) (*Top inset*) Sri C. Rajagopalachari (Public and Police);) A. B. Shetty (Health); (3) C. Subramaniam (Food and Finance); (4) K. Venkataswami Naidu (Religious Endowments); (5) N. Ranga Reddi (Public Works); (6) Dr. MV. Krishna Rao (Education, Information and Harijan Uplift); (7) V. C. Palaniswami Gounder (Prohibition); (8) Dr. U. Krishna Rao (Industries and Labour); (9) DR. Naganna Goud (Agriculture); (10) N. Sankara Reddi (Local Administration); (11) M. A. Manickavelu Naicker (Land Revenue); (12) K. P. Kuttikrishnan air (Law); (13) Raja Sri Shanmuga Rajeswara Sethupathi (House Rent Control); (14) S. B. P. Pattabhirama Rao (Rural Welfare); (15) D. Sanjeevayya (Co-operation anHousing).



CONNEMARA PUBLIC LIBRARY
MADRAS

Symbol of New Spirit of Service

The construction of the Arantangi-Karaikudi Railway Line, though admittedly a modest effort, is, nevertheless, a symbol of the new awareness which seeks to make the railway serve defined social needs more aptly than it had ever done in the past. This point was stressed by Sri K. R. Ramanujam, General Manager, Southern Railway, in his speech at Arantangi on 29th March 1952, requesting His Excellency Shri Sri Prakasa, Governor of Madras, to declare the Arantangi-Karaikudi Line open.

Sri K. R. Ramanujam observed while calling upon the Governor to declare the Arantangi-Karaikudi Railway open, that it was not a very glamorous episode in the history of the Railway. For sheet romance of railway construction and the vital place they occupy in the national economy, there are worthier competitors in the field such as the Assam Railway link and Chittaranjan. In comparison with these achievements of renascent India, the Arantangi-Karaikudi Railway is a very modest effort. Hardly 18 miles in length and with no great engineering feat to boast of, it is almost dwarfed, in the physical scale of its conception, by the many railway enterprises of the post-war era. Nevertheless, it is a symbol of the new awareness which seeks to make the railway serve defined social needs more aptly than it has ever done in the past.

The Arantangi-Karaikudi Railway is exactly 17·07 miles in length. There is already a rail route from Arantangi to Karaikudi in existence, made up of different sections of the Main and Branch lines totalling 196 miles. The new line thus closes a small gap and completes a triangle one vertex of which has, for several years, been truncated from the base, owing to historic accidents of railway ownership and construction.

Revised Policy Behind Undertaking

Railway undertakings are predominantly commercial in outlook and new lines are not embarked upon unless there are prospects of remunerating reasonably the capital invested. Sir Edward Benthall, the last Member of the Viceroy's Council in charge of Transport, outlining the post-war policy of transport in this country, said: "There is no sense in building a Railway if a road would do the work equally effectively, or unless for very good reasons, in building both in competition for a traffic which would be carried by one or the other." The implication of this statement was that in the post-war years the construction of additional main and branch lines was not expected to be spectacular and that the criterion of profitability would apply to all new projects perhaps more rigorously than ever. The policy he enunciated was the offspring of the Government of 1945.

With the advent of independence a fresh epoch commenced in the history of our country. Our leaders have rightly insisted that with the inception of the new order they cannot be unmindful of the heavy responsibility that rests on their shoulders in giving a proper lead in the revision of old policies and enunciation of new policies and their implementation.

Having successfully triumphed over the deterioration in equipment and operation due to the war and the unprecedented difficulties and damage during the post-partition period, the Railway are now well on the road of rehabilitation and expansion. We are moving rapidly towards the attainment and maintenance of a progressive standard of operative efficiency and public service. We are fully conscious of our new role to function as a fit instrument of such social transformation as is willed by the public through their chosen organs of the Government.

Quick Transport of Food

The Arantangi-Karaikudi Railway requires to be considered in the new context. During the years 1946–50, the necessity for this short link was keenly felt due to the need for quick transit of food from the surplus regions to the deficit areas in this part of the Madras State. An investigation into the traffic prospects of the line made on previous occasions definitely indicated that viewed as a commercial undertaking, it would not be remunerative, but as an amenity in the general scheme of national rehabilitation it might find a place. The food emergency in recent years spotlighted the necessity for a quick outlet from the rice-growing areas of the Tanjore District to the deficit pockets in Ramanathapuram District and elsewhere. The problem of food having become paramount in 1949, the question of providing the new Arantangi-Karaikudi Link had to be reconsidered as a part of social policy.

Sri C. Rajagopalachari in the message which he issued to the nation as Governor-General on the occasion of the second anniversary of Independence, said that food was our immediate and most important national programme. He cited a verse from our ancient scriptures: "*Annam bahu Kurveeta Tadvritam*—Let us dedicate ourselves to the increased production of food." Complementary to increased production is the quick transit of food from surplus to deficit areas. We might add to the Vedic injunction and say: "Let us dedicate ourselves to the quick transport of food". It was in the highest national interest, therefore, that all means were to be made available for overcoming the shortage of food. The sanctioning of the Arantangi-Karaikudi Project by the Government on March 27, 1950, was to help to bring food to a region that was agriculturally resourceless and which, without speedy communications, was frequently susceptible to famine. It is the result of the new awareness of social responsibility which inheres in modern railway administration.

Picture on the opposite page:

NEW RAILWAY LINK

H.E. the Governor of Madras recently inaugurated the new railway line between Arantangi and Karaikudi. The line is 17 miles long and cost Rs. 42 lakhs.

Statistical Details

Here are a few details pertaining to the construction of this Railway—

Its length is 17·07 miles.
The gauge is the usual Metre Gauge, viz., 3′ 3 1/3.″
The capital cost involved is Rs. 42 lakhs.
The total quantity of steel work—330 tons.
The total earthwork for banks—12½ million cubic feet.
The total earthwork in cutting—2½ million cubic feet.
The total concrete—142,000 cubic feet.
Masonry work—200,000 cubic feet.

The Railway will serve a population of 50,000 and is expected to yield about a million ton miles of traffic per annum. With the opening of this link a muchfelt need of the public of Tanjore, Tiruchirappalli and Ramanathapuram Districts has been fulfilled and this transport facility, particularly in regard to food, will go a long way towards the betterment of conditions of the population in this area. Valaramanickam, Periakottai and Kandanur-Puduvayal villages and the surrounding hamlets stand to develop considerably from the opening of this line. In addition, the link provides an alternative main line route between Madras and Ceylon ; the distance from Madras to Dhanushkodi via this route being only 410½ miles as against 425¼ miles via Mayavaram and Tiruchirappalli.

This 17-mile Railway link which was opened by His Excellency Shri Sri Prakasa, Governor of Madras, on March 29, 1952, is the first section of railway to be constructed in South India after the termination of the Second World War, the last to be constructed in the Southern Railway being the Sagara-Talguppa line (ex-M.S. Railway) over a distance of 9·5 miles, in November 1950.

The railway distance between Arantangi and Karaikudi before the opening of the line was 196 miles, the route traversing Tiruvarur, Tanjore and Tiruchirappalli. The present link which short-circuits this long distance, provides direct communication from Tanjore to Ramanathapuram District passing through a portion of Tiruchirappalli District. The need to connect Arantangi with some near centre in Ramanathapuram District had been felt as early as in 1924, when a survey was conducted for an Arantangi-Manamadura line. In 1939, a fresh survey was made to connect Arantangi with Karaikudi, but the traffic survey did not at that time hold out any prospect of remunerative traffic.

It was the serious food shortage during and after World War II that underlined the imperative need for quick transport and for a direct link from the surplus areas of the Cauvery basin to the comparatively unfertile deficit pockets of Ramanathapuram District. Also with the coming of independence it was the general welfare of the people of the area rather than the commercial objective which came to actuate the policy of the Railway Administration.

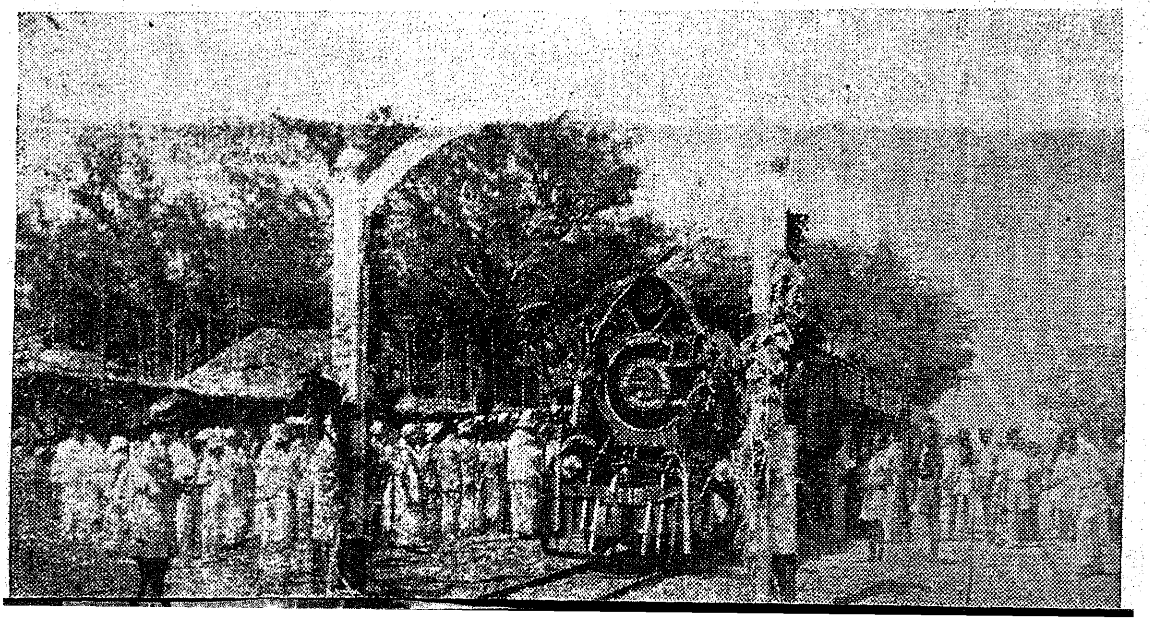
Construction Details

The work of constructing the Arantangi-Karaikudi link was sanctioned in March 1950 and the final location survey was completed by July 1950. The foundation for the first pier of the Vellar Bridge, the longest bridge on this section, was laid on September 5, 1950. The entire work of construction was completed early in April.

The section measures 17·07 miles in length and is laid with 50 lb. bull head rails on cast iron pot sleepers. There are two crossing sections, Valaramanikkam and Kandanoor-Puduvayal. There are also two flag stations, Idaiyar and Periyakottai. The two major bridges on the section are one across the Vellar consisting of nine 60-feet spans and the other across the Pambanar consisting of six 40-feet spans, built on well-foundations. The project has cost approximately Rs. 42 lakhs.

Apart from the advantages which are sure to result from the provision of a direct link between Tanjore and Ramanathapuram Districts, it is hoped that the construction of this link will lead to the economic development of this sparsely populated area. The link also provides an alternative main line route between Madras and Dhanushkodi.

NEW LINK : Gaily decorated, the Governor's Special passes through a resplendent arch, inaugurating the new railway link between Arantangi and Karaikudi



Multipurpose Co-operative

The Denduluru Multipurpose Co-operative Society No. 2856 Denduluru, West Godavari District, was registered as a credit society in the year 1918 and started working from 29th November 1918. The Society was converted into a full-pledged multipurpose co-operative society on 26th October 1948 when the Society's by-laws were amended *en bloc*. Its area of operations includes Denduluru village and three hamlets, whose population number 7,000. The Society has enlisted 643 members with a paid-up share capital of Rs. 15,987.

The maximum credit limit of the Society is Rs. 1,50,000 and the borrowings include fixed deposits from members and non-members and thrift deposits amounting to Rs. 29,897. Loans from the Eluru Co-operative Central Bank S.T. Rs 40,950, L.T. Rs. 39,114 and cash credits, special and ordinary, Rs. 2,130. The Society is also granted a special interest-free loan of Rs. 4,750 of which Rs. 2,034 is outstanding. With the Reserve Fund of Rs. 11,948 the Society's working capital comes to Rs. 1,30,112 as against a sum of Rs. 1,19,212 working capital at the end of 1950-51. Loans have been issued for members to the extent of Rs. 75,268 under short-term loans for agricultural purposes and Rs. 40,005 under long-term loans for redemption of prior debts and for reclamation of lands. The total number of loans amounted to Rs. 1,15,273 and was issued to 450 members as against Rs. 99,030 at the close of 1950-51.

The investments of the Society are Rs. 24,397, and these include Reserve Fund investment of Rs. 10,739 both in National Savings Certificates and deposits in Central Bank, share capital invested in other co-operative institutions Rs. 9,305, and value of stocks amounting to Rs. 4,353.

The Society is managed by a Panchayat consisting of five members elected once in two years, and has an establishment consisting of two clerks and an attender on a monthly recurring expenditure of Rs. 155.

The Society undertakes various multipurpose activities for the benefit of its members and non-members. Its by-laws have been amended so as to include the entire Denduluru Firka for distributing agricultural implements and manures. The business transactioned in agricultural implements and manures is given below :—

	1950–51.		1951–52 (29th February 1952).	
	Purchases.	*Sales.*	*Purchases.*	*Sales.*
Agricultural implements.	19,428	21,063	8,483	6,061
Manures	10,635	10,684	7,024	6,889

The Society is dealing in production and distribution of pure Vegetable oils, Gingelly and Coconut oils, and there is increasing demand for these articles required for domestic use. The Society is also selling medium varieties in mill cloth, silk and woollen fabrics. Purchases and sales in respect of these items are furnished below :—

	1950–51.		1951–52 (*upto 29th February* 1952.	
	Purchases.	*Sales.*	*Purchases.*	*Sales.*
Mill cloths and silks, etc.	7,080	6,478	1,498	2,000
Gingelly oil	1,015	1,040	447	427
Gingelly cake ..	..	276	..	190
Coconut oil	345	378	376	488
Coconut cake.. ..	..	26	..	62
Kerosene oil	925	898	..	128

The Society hired a tractor from the Agricultural Department and arranged for ploughing of waste lands of nearly 1,700 acres available in the village. The tractor worked during the period 28th November 1950 to 18th July 1951 and ploughed 457 acres of dry land belonging to 62 ryots. A sum of Rs. 4,570 was collected and paid to the Agricultural Department towards hire charges. Very recently Government have sanctioned a special concession rate of Rs. 6-4-0 per acre for ploughing the remaining extent of waste lands as against Rs. 10 scheduled rate in their G.O. No. 6, dated 4th January 1952. The Society is now taking steps to do propaganda and get all the waste lands ploughed during this season.

The Society has also been selected to work the Village Industries Development Scheme under Rural Reconstruction as per G.O. No. 133, dated 10th February 1951 (Rural Welfare), and commenced supply of raw material to artisans pursuing to different occupations in the Firka, with effect from 1st May 1951. The Government have placed at the disposal of the Society an interest free advance of Rs. 40,000 for purchase of raw material, besides free grants to maintain a clerk on Rs. 50 per month, to hire godowns on rent at Rs. 100 per month and Rs. 500 for purchase of equipment. The Society purchased wood worth Rs. 4,933, leather worth Rs. 18, copra worth Rs. 260 and distributed material to the value of Rs. 2,806. Iron and steel required for making 250 country double-bullock carts, sickles, axes and spades have also been indented for, and allotments are expected to be made shortly.

Thus the Society is endeavouring to be of use to its members and non-members in their varied occupations, both in the nature of giving financial assistance, supplying domestic and agricultural requirements and also securing for them technical assistance. The Society earned a net profit of Rs. 1,699 for the year 1950-51 and created a Reserve Fund of Rs. 11,948. The Society has been taking all measures to carry out all suggestions given by distinguished visitors including the Registrar of Co-operative Societies, Madras, the District Collector and other non-officials.

Resettlement of Ex-Servicemen

The Reid Co-operative Timber Works, Tiruvottiyur, is one, of many others, established for the resettlement of demobilised Army personnel. It specialises in cabinet making. From the funds made available by Government, it bought a site together with some buildings adjoining the Western India Match Factory in Tiruvottiyur at a cost of Rs. 65,000. It undertakes manufacture of standard articles required by Government offices and public institutions as well as household furniture. It endeavours to ensure fine finish and workmanship and to give satisfaction to its customers. It uses high quality wood. Articles worth Rs. 22,436 were manufactured during the half-year ended 31st December 1951 and finished products to the value of Rs. 25,033 were disposed of. Recently the workshop manufactured and supplied a laboratory research table to the Veterinary Biological Research Institute at Ranipet, which can be seen in the photograph. The table needed great technical skill and though it was the workshop's first attempt in the manufacture of articles of tnat type it executed the order to the satisfaction of the authorities. Many City offices are now extending their support and patronage to the workshop. The authorities of the workshop are grateful to them.

(Community Projects—Continued from page 6.)

Rs. 38 crores, out of which the rupee expenditure is expected to be about Rs. 34 crores and the dollar expenditure which will be mostly in the form of capital goods and equipment, about Rs. 4 crores. The financing of the projects will be largely in the nature of long-term loans to the State Governments for self-financing projects.

The Central contribution will be taken out of the Indo-American Technical Co-operation Fund recently established under an agreement with the Government of the U.S.A. in which the American Government had promised to make a contribution of $ 50 millions to be made available to India by the 30th of June 1952.

Palm Trees in Poromboke Lands for Co-operatives

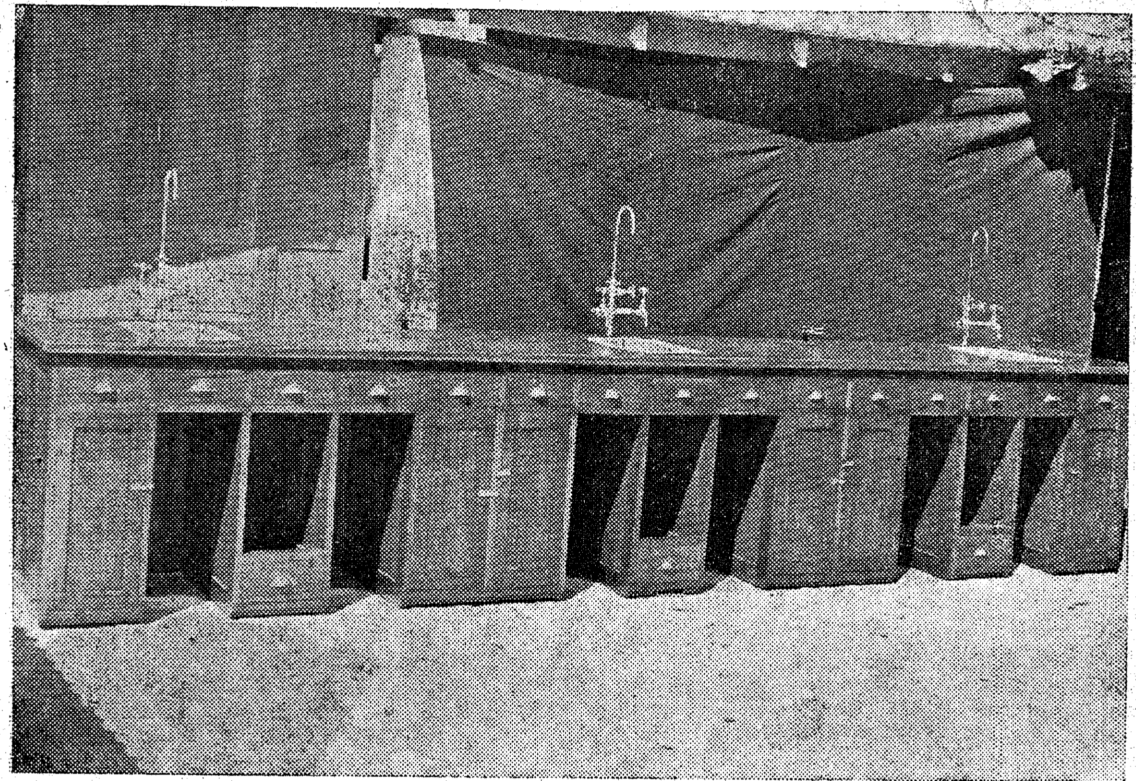
The Government have agreed to give on lease the palm trees on Government poromboke lands to jaggery manufacturing co-operative societies in the area without public auction and fix the lease amounts that should be paid by them. Under this arrangement, ex-tappers will be able to get the trees for jaggery manufacture on easy terms. The co-operative societies manufacturing jaggery will remit the amount and sub-lease the palm trees and collect the lease amount. Following are the rates fixed by the Government for a year :—

1. Coconut trees : one rupee per tree in all districts except West Coast, Malabar and South Kanara, where three rupees will be charged per tree. 2. Palmyra trees : Eight annas per tree in all districts. 3. Date trees : Two annas per tree in all districts.

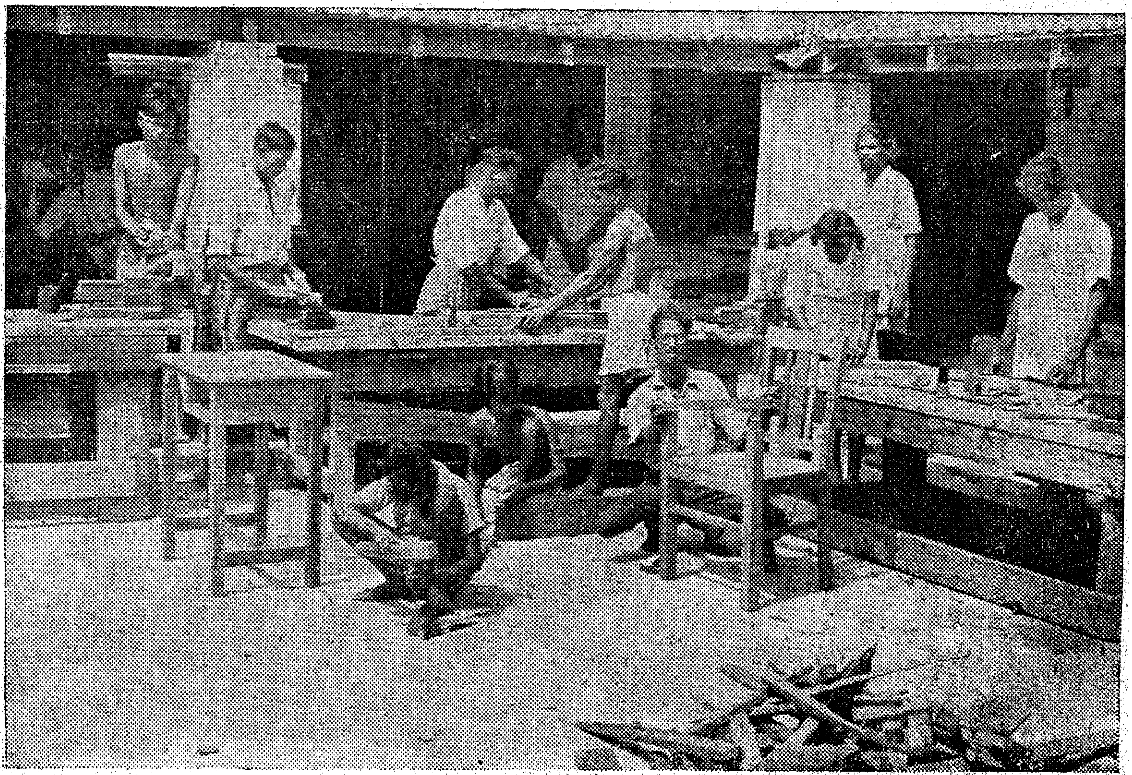
Malabar Tenancy Act: Settlement of Fair Rent

The Government have ordered, in pursuance of Rule 3 of the Malabar Tenancy (Determination of Fair Rent and Preparation of Record of Rights) Rules, 1951, a general settlement of fair rents and preparation of record of rights, in respect of every holding, situated in the areas to which the Malabar Tenancy Act, 1929, as amended by the Madras Act XXXIII of 1951, extends and for which fair rent is payable under sections 5 to 7 and 9 to 9-B of that Act.

THE REID WORKSHOP : A general view of the Reid Co-operative Timber Workshop for Ex-Servicemen, Tiruvottiyur



LAB FURNITURE : Laboratory Research Table manufactured and supplied to the Veterinary Biological Research Institute, Ranipet



CO-OP CARPENTRY : Members at work in the Reid Co-operative Timber Workshop

Electricity for Villages

The Government have sanctioned the extension of supply of electricity from the Mettur System, at an estimated cost of Rs. 4·17 lakhs, to 191 agricultural pumpsets and three industrial loads at Valavanur, Essayanur and Sakkiramallur villages in Wallajah Taluk, North Arcot District.

Sanction has been accorded for the supply of electricity from the Papanasam System to 28 agricultural pumpsets, 166 house service connections and 25 street lights, at an estimated cost of Rs. 1,10,800, at Malaipatti and Kuthiparai villages in Aruppukkottai Taluk, Ramanathapuram District.

The Government have sanctioned the extensions of supply of electricity from the Madras System to nine agricultural pumpsets, at an estimated cost of Rs. 32,000, at Kattavakkam in Kancheepuram Taluk, and for 102 agricultural pumpsets and one industrial load, at an estimated cost of Rs. 2,49,300, at Sittanjeri, Kuruvanjeri, Pinayur, Sattananjeri and Karumbakkam villages in Kancheepuram Taluk, Chingleput District.

Sanction has also been accorded for the extension of supply of electricity from the Papanasam System to 15 agricultural pumpsets, at an estimated cost of Rs. 38,200, at Ambasamudram village, Periakulam Taluk, Madurai District; to 11 agricultural pumpsets and one industrial load, at an estimated cost of Rs. 39,100, at Thambagoundenpalayam and Arasipalayam villages in Coimbatore Taluk, and to 29 agricultural pumpsets and two industrial loads, at an estimated cost of Rs. 81,400, at Vadavalli, Pugalur, and Karegoundenpalayam villages, Avanashi Taluk, Coimbatore District.

Extension of supply of electricity from the Andhra System has been sanctioned to 17 agricultural pumpsets and one ceramic factory at an estimated cost of Rs. 44,500 at Bhimadole village in West Godavari District.

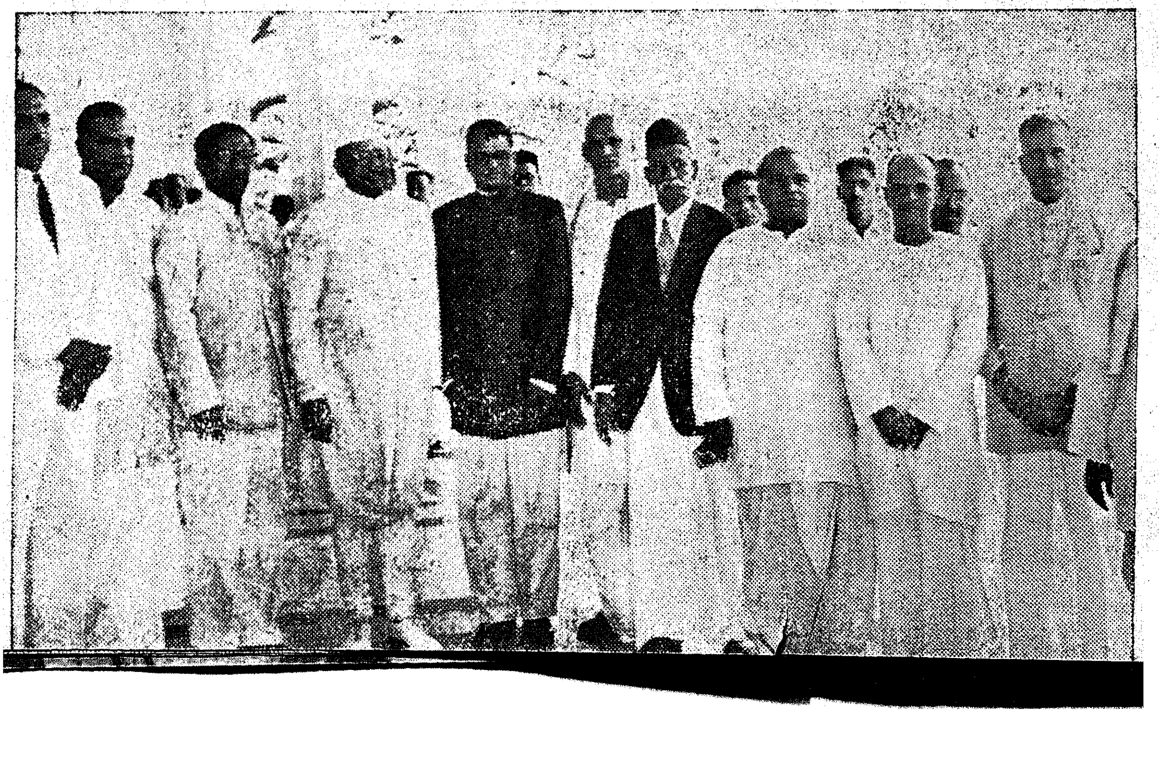
Sanction has been accorded for the extension of supply of electricity from the Rayalaseema System, at an estimated cost of Rs. 1·636 lakhs in the first year, raising to Rs. 2·197 lakhs at the end of five years, for agricultural, industrial, domestic and street lighting purposes at Molagavalli, a village selected for intensive rural reconstruction, in Alur firka, Bellary District.

The Government have sanctioned the following schemes :

Papanasam Electricity System.—(1) Extension of supply of electricity to 11 agricultural pumpsets at Avaniapuram village in Madurai Taluk, Madurai District, at an estimated cost of Rs. 39,680. (2) Extension of supply of electricity to 18 agricultural pumpsets and 28 house service connections at Anaikuttam village in Sattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 49,020. (3) Extension of supply of electricity to 22 agricultural pumpsets and 52 house service connections at Anupankulam, Sundararajapuram and Perapatti villages in Sattur Taluk, Ramanathapuram District. (4) Extension of supply of electricity to 20 agricultural pumpsets and 76 house service connections at Pottalpatti and Mettukundu villages in Sattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 60,200. (5) Extension of supply of electricity to 20 agricultural pumpsets, two industrial loads, 82 house service connections and 22 street lights at Thirukoshtiyur village in Tiruppattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 96,300.

Mettur Electricity System.—The Government have sanctioned a scheme for extension of supply of electricity to 15 agricultural pumpsets at Maskalipatti village in Rasipuram Taluk, Salem District, at an estimated cost of Rs. 39,680.

WITH THE DIRECTORS : H. E. Shri Sri Prakasa, Governor of Madras, with the directors of the Madras Central Land Mortgage Bank



Madras Electricity System.—The Government have sanctioned a scheme for extension of supply of electricity to four consumers, two industrial consumers, and one agricultural pumpset in Kodambakkam and Virugambakkam area, at an estimated cost of Rs. 96,600.

Pykara Electricity System.—The Government have sanctioned the following schemes : (1) Extension of supply of electricity to 24 agricultural pumpsets at Ramaswami-naickenpatti, Uthamapalayam village, Periyakulam Taluk, Madurai District, at an estimated cost of Rs. 55,600. (2) Extension of supply of electricity to 99 domestic services at Lakshmipuram village, Periyakulam Taluk, Madurai District, at an estimated cost of Rs. 33,300. (3) Extension of supply of electricity to 11 agricultural pumpsets, four domestic services at Madathur, Sankaramanallur village, Udamalpet Taluk, Coimbatore District, at an estimated cost of Rs. 36,700.

Andhra Power System.—The Government have sanctioned a scheme for extension of supply of electricity to three industrial (rice and flour mills) loads, 120 domestic services and 30 street lights at Abhimavaram and Cherukumilli villages, Bhimavaram Taluk, West Godavari District, at an estimated cost of Rs. 75,200.

The Government have sanctioned the following extension schemes :

Madras Electricity System.—A scheme for extending supply of electricity to 60 agricultural pumpsets and five industrial loads at Kadambathur and surrounding villages in Tiruvallur Taluk, Chingleput District, at an estimated cost of Rs. 1,74,650.

Papanasam Electricity System.—A scheme for extending supply of electricity to 17 agricultural pumpsets and 21 house service connections at Papakudi village in Ambasamudram Taluk, Tirunelveli District, at an estimated cost of Rs. 35,300.

Mettur Electricity System.—Extension of supply of electricity to 19 agricultural pumpsets at Tenmathur village in Tiruvannamalai Taluk, North Arcot District, at an estimated cost of Rs. 60,200.

Extension of supply of electricity to 19 agricultural pumpsets, one industrial load at Parangiyur village in Tirukkoyilur Taluk, South Arcot District, at an estimated cost of Rs. 68,400.

Extension of supply of electricity to 61 agricultural pumpsets and two industrial services at Sathambakkam village in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 1,02,600.

Extension of supply of electricity to Vengalapuram and Four Wells area in Tiruppattur Taluk, North Arcot District, at an estimated cost of Rs. 64,700.

Andhra Power System.—A proposal for extension of supply of electricity to 177 additional street lights and 32 domestic services at the Samalkot Panchayat area, East Godavari District, at an estimated cost of Rs. 50,000.

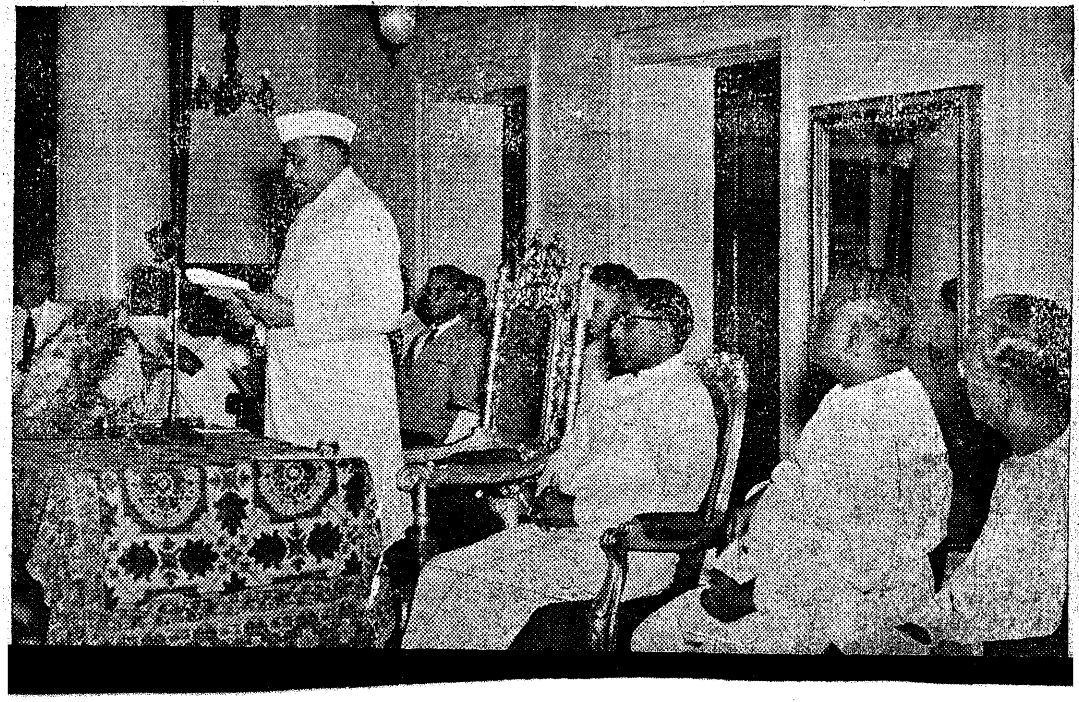
Rayalaseema Power System.—A proposal for extension of supply of electricity to seven agricultural pumpsets, three industrial loads, 75 domestic services and 20 street lights at Ujjini village, Bellary District, at an estimated cost of Rs. 73,000.

Guntur District.—Electricity has been made available for domestic, industrial and agricultural purposes in the eight villages of Guntur and Tenali Taluks of Guntur District.

The licensees in this area were not able to undertake this work so far. The State Electricity Department took up the scheme and switched on supply on February 29, 1952, to the villages of Nutaki, Ramachandrapuram, Mellampudi, Thumapudi, Ravendrapadu, Sriranga-puram, Pedapalem and Porakalapudi.

The scheme, estimated to cost Rs. 4·5 lakhs, is intended immediately to supply power for 300 agricultural pumpsets,

CONFERENCE OF LAND MORTGAGE BANKS : H. E. Shri Sri Prakasa, Governor of Madras, delivered the opening address at the Twenty-second Conference of Land Mortgage Banks in Madras State, held recently at the Rajaji Hall.



Research Institute for Cottage Industries

The Government have sanctioned the establishment of a Cottage Industries Research Institute, which would be located in the compound of the Industrial Engineering Workshop, Madras.

The Research Institute will mainly concentrate on the development of the following fifteen cottage industries by designing new inventions and appliances, wherever possible, or by suggesting improvements on the existing ones: Carpentry, Blacksmithy, Sheet Metal Work, Bell Metal Work, Light Metal Casting, Fibre Extraction and Rope making, Rice Pounding, Flour Grinding, Oil Pressing, Gur making, Basket and Mat making (rattan and bamboo), Toy making, Cashewnut roasting, Handloom Weaving, Ball thread making and Distillation of essential oils.

The functions of the Institute will be: to make a comprehensive study of the designs, tools and methods, followed here and elsewhere in cottage industries, to adapt and improve upon them, and when necessary, to design new tools and evolve new techniques and processes, to investigate and solve problems relating to heat treatment of materials used in specific cottage industries, and to conduct experiments and research on the mechanical treatment of raw materials used in cottage industries.

This action has been taken on the recommendation of the State Cottage Industries Board that the starting of the Research Institute was a necessity for the development of cottage industries.

two industrial services and a cinema load that have already applied for power.

The Government have sanctioned the following schemes:

Mettur Electricity System.—(1) Extension of supply of electricity to 171 agricultural pumpsets, one flour mill at Pinnaithangal, Agaram, Pudur, Pindithangal and Vellambi villages in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 3,94,600. (2) Extension of supply of electricity to 106 agricultural pumpsets, five industrial services, 99 domestic services at Vadakkadapanthangal, Melvenkatapuram and Kodakkal villages in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 3,26,100.

Andhra Power System.—A scheme for extension of supply of electricity for 244 agricultural services and eight industrial services at Pedavadlapudi, Chinnavadlapudi, Chiluvur and Tummapudi villages, Guntur District, at an estimated cost of Rs. 4·691 lakhs.

Pykara Electricity System.—(1) Extension of supply for a tea factory, and 196 domestic services in Arundale Estate, Ootacamund Taluk, the Nilgiris District, at an estimated cost of Rs. 83,500. (2) Extension of supply of electricity for agricultural purposes at Sinnakkuyil, and Kallapalayam villages, Palladam Taluk, Coimbatore District, at an expenditure of Rs. 36,100.

Rayalaseema Power System.—A scheme for extension of supply of electricity for the mica mines of the Seetharama Fresh Water and Prospecting Pit, Tiruwarla, Gudur area, Nellore District.

Madras Electricity System.—A proposal for extending supply of electricity to 67 agricultural pumpsets, five industrial services and 66 domestic services at Korattur, Padi, Nolambur, Mogapper, Adayalambattur and Manur villages in Saidapet Taluk, Chingleput District, at an estimated cost of Rs. 2,55,500.

The Government have sanctioned the following schemes:

Mettur Electricity System.—(1) Extension of supply to 32 agricultural pumpsets and one flour mill at Thurinjapuram village in Tiruvannamalai Taluk, North Arcot District, at an estimated cost of Rs. 92,800. (2) Extension of supply to 22 agricultural pumpsets and two industrial loads at Vengampatti village in Salem Taluk, Salem District, at an estimated cost of Rs. 46,600. (3) Extension of supply to 27 agricultural pumpsets and one industrial load at Namagiripet village in Rasipuram Taluk, Salem District, at an estimated cost of Rs. 72,100. (4) Extension of supply to 17 agricultural pumpsets at Errasamudram and Peddanaickenpalayam villages in Attur Taluk, Salem District, at an estimated cost of Rs. 42,000. (5) Extension of supply to 25 agricultural pumpsets, two industrial loads and 19 house service connections at Melapalayam village in Karur Taluk, Tiruchirappalli District, at an estimated cost of Rs. 86,500. (6) Extension of supply to 32 agricultural pumpsets, one existing agricultural load and one industrial load at Lokapuram village in Wallajah Taluk, North Arcot District, at an estimated cost of Rs. 83,500. (7) Extension of supply to 22 agricultural pumpsets and one industrial load at Mettupatti and Perumpalayam villages in Salem District, at an estimated cost of Rs. 70,070.

Papanasam Electricity System.—(1) Extension of supply to 28 agricultural pumpsets and 25 house service connections at Sivanandanur, Madathur, etc., villages in Ambasamudram Taluk, Tirunelveli District, at an estimated cost of Rs. 77,200. (2) Extension of supply to 40 agricultural pumpsets at Naranapuram, Alamarathupatti and Poochakapatti villages in Sattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 83,850. (3) Extension of supply to 38 agricultural pumpsets and 88 house service connections at Periaperali village in Sattur Taluk, Ramanathapuram District, at an estimated cost of Rs. 79,500. (4) Extension of supply to 18 agricultural pumpsets and 53 house service connections at Puliyuram village in Aruppukkottai Taluk, Ramanathapuram District, at an estimated cost of Rs. 63,060.

Madras Electricity System.—Extension of supply to 142 domestic services at Gandhinagar Colony No. 2, Adyar, at an estimated cost of Rs. 89,800.

Pykara Electricity System.—Extension of supply for agricultural purposes a Thekkalur and Pudupalayam, Avanashi Taluk, Coimbatore District, sanctioning revised estimate for Rs. 1,94,000 and Rs. 1,14,600. Extension of H.T. supply of electricity of 400 K.W. to Bleaching and Printing Factory of the United Bleachers, Limited, Mettupalayam, Coimbatore District, at an expenditure of Rs. 73,000.

Andhra Power System.—Extension of supply of electricity for agricultural and industrial purposes at Kondavarani village, Pithapuram Taluk, East Godavari District, at an expenditure of Rs. 75,400.

Migration and Food

By DR. JULIUS ISAAC

The present unsatisfactory world food situation is partly due to the unequal geographical distribution of the human race. In some countries which are densely populated in relation to the national resources, principally fertile land, at the disposal of the inhabitants, output per head and hence standards of living are extremely low. Other countries, by contrast, are sparsely populated and have large reserves of natural resources which are not fully exploited; in these countries output per head and standards of living are much higher. Moreover, it is precisely in the densely populated countries such as India and China that further rapid population growth is occurring or likely to occur.

In the second group, for instance, in Australia, New Zealand and to some extent in Canada and the U.S., natural increase is much slower and is likely to decline as a result of the further spread of family limitation. Therefore why not move some of these people? Population movements could even out the distribution of human beings over fertile land; 'have-not' nations would gain more than the 'haves' are likely to lose. They could increase total food production, as well as distribute it more equitably, because in new surroundings the work of emigrants from an overcrowded country would be more productive; a Japanese peasant emigrating to California may produce twenty times as much as in his native land. They could raise output per head in the old country by reducing overcrowding.

Even output per head in the new country may benefit from migration if circumstances are favourable; as, for instance, there is a shortage of manpower in California for the type of work the Japanese peasant can do well. Under modern conditions very large transfers would be unlikely to produce such good effects and output per head in California might well be reduced. But, broadly speaking, the great nineteenth and early twentieth century migration from Europe to the new continents of America and Australia did raise productivity in both the sending and receiving countries.

The Factors Involved

Some of the considerations which follow are self-evident, though easily overlooked; others involve value judgments on which it is essential to be clear.

(1) Increasing food production is not an end in itself, but a means of increasing human welfare; the competing claims of other essential human needs have to be taken into account. Similarly, an increase in world food production would be of little value if it were not available to those who need it most. For instance, less than fifteen years ago the problem of the main food producing countries was over-production relative to effective demand. The result was 'starvation in the midst of plenty' and an artificial reduction in output. Moreover, many food commodities are not easily interchangeable. Surplus wheat in Canada or surplus meat in the Argentine may not be suitable substitutes for a rice deficit in India.

(2) International trade makes it possible for densely populated countries with little fertile land to reach high standards of nutrition by exchanging manufactured goods and services for food. However, there may be reasons of a non-economic nature why highly industrialised countries should prefer to produce food which they could import on more favourable terms.

(3) Population is maldistributed within many countries. Thus a conflict has often to be faced between internal movements and national needs on the one hand, and international migration and the need for international equilibrium on the other hand.

(4) In a free society the decision to emigrate is left to the individual. He is normally little concerned with the effect of his migration on the old or the new country. The effects of such movements on the world food situation are thus incidental and not necessarily favourable. It is, however, possible for suitable measures to encourage the outward movement and to give it a desirable direction (assisted migration). Indeed, in theory, adjustment of population to resources could be attained by compulsory population transfers. Such policy, apart from being objectionable on ethical grounds, would be impracticable for reasons given below.

(5) 'Man is of all sorts of luggage the most difficult to transport'. Since Adam Smith made this statement more than 170 years ago the physical difficulties in carrying out migrations have been practically removed. The present shortage of shipping and building material is temporary and in a few years' time it will be technically possible for many hundred thousands of people to go

Food Offences And Punishments Awarded

During the fortnight ending February 15, 1952, 398 cases of prosecutions against food offences were disposed of in the Madras State (except Chittoor District). The accused persons in these cases were people of all classes. Fines, ranging from Re. 1 to Rs. 200 and sentences of imprisonment up to two months were imposed.

Pitchai Servai, a ryot of Tanjore District, was fined Rs. 200 or rigorous imprisonment for three months for illicit transport of paddy. A fine of Rs. 200 or rigorous imprisonment for two months was imposed on Mupparapu Venkata Rao, a cultivator of Annavaram, Krishna District, for failure to deliver surplus paddy.

During the same fortnight, other departmental punishments such as warnings, fines, forfeiture and enhancement of security deposits, suspension or cancellation of retail and wholesale licences, etc., were also awarded to persons, who were dealing in foodgrains, in 204 cases.

every year from poor and densely populated areas to wealthy and relatively sparsely populated areas.

But the psychological obstacles to an economically desirable redistribution of population through mass migration have become almost insurmountable. The organisation of mankind in national units has become more rigid. The immigrants, if their language, national or ethnic characteristics differ from those of their new community, are regarded with suspicion or open hostility. If large numbers are involved, there is anxiety lest they form a national minority endangering the traditional way of life and the cultural inheritance of the society receiving them. The economic advantages of immigration to the receiving country have become less obvious and in many cases more doubtful. The 'wide open spaces' of undeveloped fertile land belong largely to the past. Immigrants are now often competitors to established groups in the community, who are apt to organise resistance to immigration and to make life for those who are admitted as uncomfortable as possible. An attempt to enforce immigration under such conditions could not add to human welfare but to the misery of all concerned. The precondition of large scale migration is a climate of opinion favourable to it.

(6) Migration from poor and over-populated countries would be harmful rather than beneficial if the emigrants were only replaced by more rapid population growth in the countries of origin. At the present rate of world population growth it may soon become difficult to provide adequate nutrition for the human race. Movements which are likely to result in an even higher rate of increase must be regarded as undesirable.

Emigration and Asia

The population of Europe had in the nineteenth and early twentieth centuries a safety valve for population pressure by settlement in the empty new continents. This mechanism ceased to operate satisfactorily after 1914 but by that time the need for it had become less urgent. Falling birth rates were preventing excessive increase despite longer expectation of life.

Asia has been less fortunate. Emigration from its populated areas has largely remained within the continent and has been numerically unimportant compared with the populations in the countries of migration.

India, Pakistan, China and Indonesia contain over 900 million people, more than forty per cent of the world's population. These areas have long been subject to what Malthus called 'positive checks' such as malnutrition and famine disease and epidemics, and war.

Efficient methods of family limitation are almost unknown and fertility is high; until recently the standard of living had remained at subsistence level and the positive checks had prevented rapid population increases.

Technical Progress

In the last few decades technical progress has, however, somewhat raised production; with better health services, this has brought about a fall in mortality and hence large population can be further expanded till standards of living in these regions fall again to subsistence level. Indeed, improvements in production and health services cannot provide a complete solution of the problem. If it were possible to maintain progress in these respects the population in these regions might well double within less than fifty years at standards of living only a little above subsistence level, a prospect which has nothing to recommend it.

We have now to consider whether it is possible to break this vicious circle by mass emigration and to create the conditions which solved Europe's food problem during the period of rapid population a monopoly of the white nations. When in the second half of the nineteenth century immigrants from the Far East began to settle in the U.S.A., Canada and Australia, measures were taken which ended non-white immigration or reduced it to an insignificant proportion of the total inflow. Similar discrimination was gradually introduced in most of the colonial territories of the white powers in Africa, Asia and Oceania.

Asia Offers Few Outlets

Asia has offered a few outlets for the starving masses in China and India as well as for Japan's expanding population. For instance, Chinese and later also Japanese and Korean workers and settlers went by the hundred thousand to under-populated Manchuria. Indians and Chinese went to Malaya, Burma and Indonesia. Under favourable economic and political conditions most of the receiving countries could carry a considerably larger population. Manchuria, with a pre-war population of 35–40 million, could from the standpoint of agriculture alone probably support a population of 100 million and more. Burma, Thailand and French Indo-China, Indonesia, the Phillippines and Malaya have sufficient land not now in use or so little in use to make a significant redistribution of population possible. In the case of Indonesia a promising scheme had started before the war for transferring surplus population from Java and Madura to the underdeveloped and less densely populated islands.

Present political conditions in practically the whole of South-East Asia, however, do not conduce to large-scale settlement or to the capital imports which are needed for it.

Plainly, however, these regions can never become an adequate outlet for the crowded millions of India and China. Moreover, their own populations may well grow rapidly. Finally, in the recent past such movements have given rise to racial friction and economic disturbances. On the whole it seems the natives have benefited little from immigration. The same applies to colonial territories. The European powers can defend their restrictive immigration policies in non-self governing territories by arguing that they act as trustees and that the admission of Asiatic immigrants would not conduce to the welfare of the natives. The fact that their standards are often less strict in the case of white immigration may be held against them, but it does not invalidate the argument.

Clash of Interests

The clash of interests would be even obvious if the white nations were to open their doors to Asiatic immigration. Those in favour of such a policy argue as follows: Although the open frontier has disappeared in almost all the new countries, millions more could still be absorbed

and food production could be greatly extended. The claim of the white nations to the lion's share of the world's natural resources is based on power, not on right. Even if large-scale immigration should lead to slightly lower standards of living in the new countries, this sacrifice should be made for the sake of world peace and the welfare of the underprivileged nations.

But there is little evidence, so the argument runs, that mass-immigration, if properly planned, must involve lower standards of living in the receiving countries. Instead of making great efforts to attract immigrants from Europe, which is ageing and relatively well off, the new countries should remove the colour bar and invite settlers from poverty-stricken India and China and over-populated Japan; particularly where there are vast fertile regions which are undeveloped because the climate is not suitable for white settlers.

The Case for Restrictive Attitude

The restrictive attitude is defended on five grounds :—

(1) The volume of immigration which could be absorbed is insignificant in comparison with the number of people needing relief from population pressure.

Against this the Japanese Press, for instance, quoting wartime surveys, claims that New Guinea, populated now by 200,000 natives, could support at least twenty million Japanese. Even if these claims could be substantial and the necessary capital for development were available, it is difficult to see how the political and strategic objection to such schemes could be overcome.

(2) The admission of non-white immigrants, as experience shows, is bound to produce social and racial conflicts which are insoluble. Assimilation of the newcomers and the amalgamation of two entirely different cultural heritages is impossible and undesirable.

(3) The immigrant, because of their high rate of natural increase, would merely produce in the new countries the same over-population and land hunger from which they had tried to escape.

(4) The countries of emigration would not benefit from the emigration of their nationals because population losses through emigration would soon be replaced by gains through falling mortality. The Malthusian positive checks —hunger and disease would soon be in operation again.

(5) The white nations should use their natural resources and superior technical knowledge in a different way. They could make a far greater contribution to the solution of the population problem in the Far East and the same applies to other areas of over-population such as the M'ddle East and the West Indies—by helping these nations to produce conditions under which there are sustained gains from mortality but under which also such gains are balanced by corresponding losses from falling fertility.

Emigration in World Affairs

What are these conditions and how can they be produced ? Here are some of the necessary features :—

Development of industries to support large urban population,

Modernisation and expansion of agriculture,
Promotion of international trade,
Extension of popular education,
Family limitation through birth control,
Better administration and political stability,

Corruption Among Government Servants

During the month of October 1951, corruption among Government servants was brought to notice against 292 persons including those against whom proceedings were pending at the end of the previous month. Of these, 17 persons were let off as charges against them were not proved. Corruption was successfully detected in the case of 15 persons and they were suitably punished. Of these, two persons were awarded minor punishments. The names and designations of the 13 persons who were awarded severe punishments are as follows :

Govindaswami, Head Constable, Madurai Rural District, Achuthan Kutti Nair, Sub-Inspector, Tirunelveli District, Venkataraman, Probationary Sub-Inspector, Coimbatore District, and G. J. Samuel, Fireman Driver (Dismissed); S. Subramanian, Stores Assistant, Electricity Department, M. Madhava Rao, Petty Officer, Excise Department, V. Vaidyanathan, P. A. Munusamy, Manicam, P. Munusamy, Arjunan, and D. William, Prohibition Guards (Removed from service); P. G. Subbiah, Temporary Prohibition Guard (Discharged from service).

During the month of November 1951, corruption among Government servants was brought to notice against 285 persons including those against whom proceedings were pending at the end of the previous month. Of these, five persons were let off as charges against them were not proved. Corruption was successfully detected in the case of 19 persons and they were suitably punished. Of these, five persons were awarded minor punishments. The names and designations of the 14 persons who were awarded severe punishments are as follows :—

K. Iswarudu, Constable, Visakhapatnam District, N. C. Sanjeeva Reddy, Head Constable, Cuddapah District, Guruswamy, Head Constable, Ramanathapuram District, Sheik Moideen, Kalimuthu and Vairavan Chettiar, Constables, Ramanathapuram District, Veerappan and Mohamed Ghouse, Constables, Salem District, Vyapuri Pandaram, Constable, Coimbatore District, Ch. Sambayya, Tahsildar, Guntur District, K. Kodanta Kamath, Revenue Inspector, Sullia, South Kanara District, Muhammed Hussain, Additional First Class Magistrate, Tuticorin (Dismissed); Ch. Venkateswara Rao, Section Officer, Public Works Department, Palacole (compulsorily retired); S. M. Veeranna Thevar, Inspector of Police, Palni Circle (Removed from service).

Proceedings against 261 persons were pending at the end of the month.

Destruction of the caste system and other social obstacles to individual advancement.

As a complement to such a policy of raising standards in densely populated backward countries sparsely, populated underdeveloped regions should also be taken in hand. For instance, irrigation could turn many meagre areas in the Middle East, America, Australia and elsewhere into intensely cultivated territories.

In this setting the contribution of international migration can be seen to be real, though limited.

It would relieve the pressure of population during the initial phase of rising standards and so help to maintain the progress. Thus it would facilitate the transition to lower human fertility in countries of excessive increase.

It would be the means of settling in sparse areas, once developed, with millions of farmers, who ought to be able to exchange much of their production for manufactured goods.

All this is a tall order. Such projects can only be carried out if they are backed by the resources of the advanced Western nations.

Work of International Agencies

The larger part would probably be needed for rehabilitation and development in the countries of population pressure, but the opening up of underdeveloped areas for the settlement of immigrants would also require substantial amounts. Investment of these kinds may be bad policy from the short-term business point of view, yielding no interest and perhaps even lowering consumption in the wealthier countries. In the long run and in terms of international welfare and peace probably no better investment could be thought of. The resources are limited and much painful discrimination between projects will be necessary. Such discrimination would have to take account of the willingness of the beneficiary countries to admit settlers from the distressed areas of rapid growth. For little relief can be expected from international population movements if their volume is still determined on either side, sending or receiving, by national self interest on racial prejudice.

A change of attitude is required, a transformation of outlook. It will not emerge spontaneously, and grave responsibility therefore rests on the various international agencies concerned with Food and People. The problems of migration are dealt with by the International Labour Organisation, by the International Refugee Organisation and by various Councils and Commissions of the United Nations Organisations. The Food and Agricultural Organisation and the World Health Organisation have to cope with the nutritional side of the problem. The International Bank of Reconstruction and Development, the International Trade Organisation and, finally, UNESCO will have important contributions to make. Whether international co-operation organised on this 'functional' basis will be equal to the task of resolving the conflicts which prevent better adjustment between population trends and food production may be a question worth discussing.

Truman's Point Four

Materially, these projects have been raised to practical politics by President Truman's inaugural address of January, 1949. As his 'fourth point' he proposed 'a bold new programme for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas—our aim should be to help the free peoples of the world to produce more food, more clothing, more materials for housing, and more mechanical power to lighten their burden.'

Finally, in May, 1949, the United Nations published a report setting forth 'a comprehensive plan for an expanded programme of technical assistance for economic development through the United Nations and its specialized agencies, paying due attention to questions of a social nature which directly condition economic development.' The report states 'while it is improbable that migration will be as important in the twentieth century as it was in the nineteenth, it can still make a substantial contribution to underdeveloped countries where the population is relatively sparse . . . Under modern economic and social conditions successful migration, either for employment or settlement, requires careful technical planning in which international technical assistance can be of great value to the country receiving the migrants and to the country from which they come.'

(*Adopted from the booklet* People on the Move *published by the Bureau of Current Affairs*, 117, *Piccadilly, London, W.*1.).

Relief Measures in Cuddapah District

The Government have sanctioned the execution of 52 road works, costing Rs. 7,92,500, for providing employment to agricultural labourers affected by adverse seasonal conditions in Cuddapah District.

An additional allotment of Rs. 1,94,760 has also been sanctioned by the Government for meeting the expenditure on Rural Water Supply schemes in Cuddapah District.

Chief Minister's Appeal

(*Continued from page* 3)

No violent changes will produce good. By wiping out large masses of people and indoctrinating the remaining citizens for two or three generations we could produce a picture of homogeneous comfort which we could exhibit in photographs and on the silver screen. But this is no good. Means as well as ends should be good.

Indeed, ends are in the hands of God but we are responsible for the rightness of the means we employ. We are not responsible for ends attained, but we are fully responsible for the means we employ.

Brothers and sisters, pray for rain; pray for the poor and distressed in our land. There is no problem in our politics other than the problem of poverty and distress. No man can be happy when people around him are in distress.

(*By Courtesy, A. I. R., Madras*).

Agricultural Department in 1950-51

Reviewing the administration of the Agricultural Department for the Fasli year 1950-51, the Government have observed that the work of the Department during the year under review was quite satisfactory. although the continued unfavourable seasonal conditions retarded its activities. The Government have called upon all ranks, from the lowest to the highest in the Department, to put forward their best endeavours in increasing agricultural production and helping the State to achieve economic prosperity.

The following are other salient features of the Government's review :

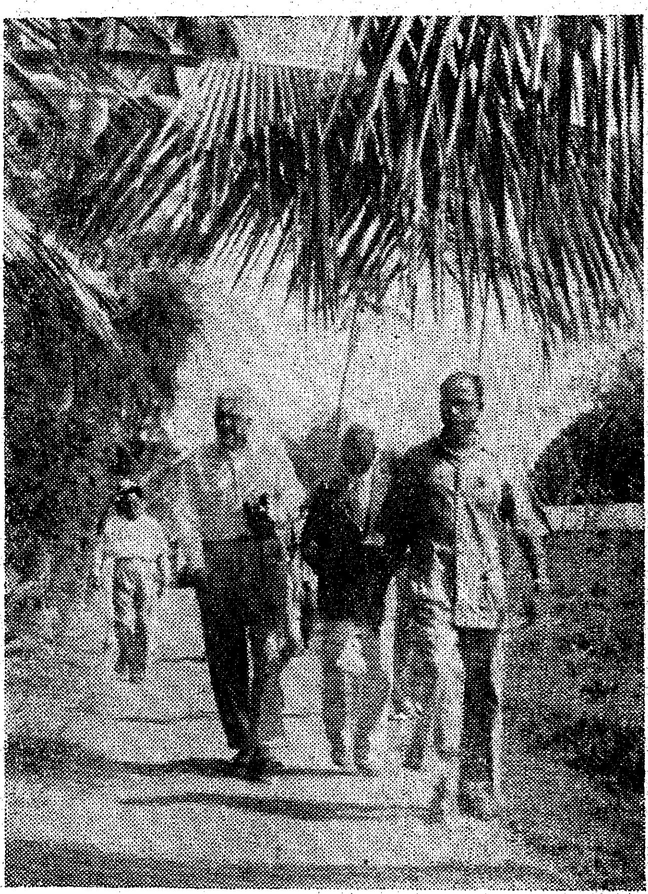
Food Production.—The main agricultural schemes worked during the year related to mechanised cultivation by tractors and bulldozers, mechanical aids for lift irrigation by supply of oil engines, electric motors, and river pumping installations, supply of manures, improved seeds and iron and steel, propaganda and publicity, and control of pests and diseases of crops. Under the scheme of mechanised cultivation, 268 tractors (136 with bulldozer attachments) were distributed among the several districts for hiring to ryots and an area of 66,720 acres was brought under cultivation by means of these tractors, as against 44,630 acres in the previous year. One thousand seventy-five oil engines and 189 electric motor pumpsets were issued to the ryots under the hire purchase system, which has become very popular, as against 207 oil engines and 49 electric motor pumpsets, issued during the previous year. Under the scheme of distribution of manures, 78,638 tons of ammonium sulphate, 12,203 tons of superphosphate, 95,983 tons of rural compost, and 131,366 tons of urban compost were distributed. Under the scheme of distribution of improved seeds, 8,211 tons of improved paddy seeds were distributed. Three hundred and one tons of improved millet seeds and 720 tons of green manure seeds were distributed.

Cotton Extension Plan.—The additional production achieved during the year is estimated at 47,390 bales, as against the target of 99,390 bales. The cultivation of cotton in the off-season fallows and rice lands in Tanjore District has been popularised.

Agricultural Education.—The total number of applications for admission into the Agricultural Colleges at Coimbatore and Bapatla was 644, as against 471 in the last year. Ten selected ryots were given training for one month in the practical aspects of dairy husbandry.

Agricultural Research.—Though no strikingly new results have been achieved in any field of agricultural research during the year, the work carried on in the different sections has been on the whole satisfactory. In view of the continuing droughts, the need for crop breeders to evolve or select strains which will stand periods of drought or uneven rainfall, cannot be too strongly emphasised.

Agricultural Credit.—The Agricultural Department distributed Rs. 21·97 lakhs as interest-free loans to ryots for the purchase of manures and seeds and Rs. 0·29 lakh for the purchase of agricultural implements. The special scheme for loans for the purchase of ammonium sulphate in intensive cultivation areas greatly benefited the ryots.



FAO CHIEF AT COIMBATORE: Dr. Norris E. Dodd, Director-General of the Food and Agriculture Organisation, recently visited the Paddy Breeding Station at Coimbatore.

Loans to the extent of Rs. 61·36 lakhs were distributed under this scheme.

Distribution of Improved Seeds

The scheme for the distribution of improved seeds to the ryots in the interior villages of West Godavari, Krishna, Tanjore, Tiruchirappalli and Malabar Districts through selected seed farm ryots at the rate of one seed farm ryot per district on payment of a commission of Re. 1 per bag of 125 lb. seeds sold, has been successful and the State Government have ordered that the scheme may be extended to all other districts at the rate of one seed farm ryot for every taluk, instead of for every district. The Director of Agriculture has been requested to select the right type of seed farm ryots for the distribution of improved seeds.

Officers of the Agricultural Department will inspect the seeds distributed by these ryot-distributors to ensure that the seeds are really pure and viable. Necessary testing facilities will be provided in the office of each Agricultural Demonstrator so that the seeds may be tested whenever the ryots want to have a test. It is hoped that the supply of pure and selected seeds will increase the yields of crops and solve our food problem.

Cotton Cultivation in Rice Fallows

On account of acute shortage of cotton in the Indian Union, it has become imperative to increase the production through all possible resources. With a view to augment the production of cotton, experiments were conducted in the Agricultural Research Station, Aduthurai, to cultivate a new short duration variety of cotton imported from Punjab, viz., P 216F, by sowing the seed in wet lands during the fallow period after the harvest of paddy.

Finding that thes experiments have proved to be successful, large areas were brought under cultivation in the last year in Tanjore District by importing this variety from Punjab. The cotton crop grew well, flowered normally, set bolls freely and yielded up to 1,000 lb. of seed cotton per acre. The results obtained in some of the important villages are given under :—

Name of the village.	*Date of sowing.*	*Area sown in acres.*	*Yield of kapas in lb.*	*Acre yield of kapas in lb.*
Thopevattaram	23rd January 1951	3·50	2,700	771
Alalgadu	18th January 1951	3·50	1,800	514
Ennanallore	14th February 1951	4·00	1,600	400
Vanathirajapuram *	4th March 1951	0·80	725	906

* Picking had not been completely finished.

These two photographs illustrate the actual crop standing in the field in two villages, viz., Ennanallore and Vanathirajapuram in Tanjore District. The ryots were not only benefited on account of cultivating cotton as an off-seasonal crop, but they were also able to get from 4,000 to 6,000 lb. of green matter per acre which added to the fertility of the soil and thereby increased the yield of the succeeding paddy crop appreciably.

Mixed Crop with Rainfed Paddy

Madras Uganda I Cotton tried as a mixed crop with rainfed paddy in Chingleput District was a success, as the crop when dibbled in lines 16 feet apart gave an acre yield of 109 lb. of kapas when the paddy crop completely failed. The cultivation of this crop mixed with rainfed paddy will ensure a steady income even in seasons when the paddy crop fails.

Cotton in rice fallows.—Growing early Punjab variety of cotton after harvest of paddy in wet lands particularly in Tanjore, South Arcot and Chingleput Districts has proved to be profitable. Experience has shown that it is advisable to sow the cotton seeds within a week after the harvest of paddy, taking advantage of the existing moisture in the soil.

During 1951, cotton crop was gappy in many of the fields. To avoid this, the following method of sowing to improve germination of seeds and population of plants is suggested. Secure cylindrical wooden pegs 6 inches long ¾ inch in diameter with one end prepared to a conical shape un to one inch. Make depressions up to a depth of 1 inch with the conical end at 6 inches apart in rows and spaced 2 inches apart. Drop two or three good cotton seeds in each depression and cover the seeds with a handful of wet loamy soil. Soil from the paddy fields itself, if it happens to be clayey, should not be used for covering the soil as such a sticky soil retards the emergence of the germinated seeds. By covering with wet loam, 93 per cent of the holes had plants on the fifth day of sowing whereas only 49 per cent of the holes had plants when clayey soil of the paddy field was used for covering. Thus, 44 per cent extra stand was obtained by practising the above method of sowing which will materially contribute to extra yield as well. Ryots growing cotton in rice fallows are requested to practice the abovementioned method of sowing with benefit to themselves.

State Extension Board

The Government have constituted a State Extension Board, consisting of the following persons :—

The Hon'ble Minister for Agriculture and Animal Husbandry—Chairman, the Commissioner for Food Production—Vice-Chairman, the Director of Extension (to be appointed)—Secretary, the Director of Agriculture, the Director of Animal Husbandry, the Chief Conservator of Forests, the Chief Engineer for Irrigation, the Registrar of Co-operative Societies, the Director of Rural Welfare and Ex-officio Joint Secretary to Government, Rural Welfare Department, the Chairman, Agricultural Research Council, Coimbatore, five non-officials, representing agricultural and rural interests (including one or two temporary honorary propagandists and registered model farmers), two non-officials, one each from the Board of Honorary Visitors to the Agricultural Colleges at Coimbatore and Bapatla.

The District Food Production Committees will do the work of fostering the development of the extension activities in their respective districts.

This action has been taken in pursuance of the resolution adopted by the joint meeting of the Advisory Board and the governing body of the Indian Council of Agricultural Research, held at Dehra Dun on May 8, 1951, recommending the implementation of an Extension Scheme for the country, so that the results achieved by research in the various spheres of Agriculture, including Animal Husbandry, Forestry and Fisheries, might be brought to the door of the cultivator and he be persuaded and helped to adopt them.

India's Best Cow

"Gulzar," adjudged to be India's best cow, won the Indian Council of Agricultural Research prize of Rs. 1,000 recently given away by Sri K. M. Munshi. The prize given to the best cow in India was donated by Sri Purshottamdas Thakurdas of Bombay.

Five and a half year old "Gulzar", owned by His Holiness Satguru Partap Singh of Jiwan Nagar, in Hissar District of Punjab, has already won five awards. It is a *Sahiwal* cow which is considered to be the best Indian milch breed. The lactational average of selected herds of this breed is between 6,000 to 7,000 lb. The prize winning cow's yield was 6,000 lb. during first lactation and 7,500 lb. in second lactation. She comes of a dam whose milk yield has reached 9,000 lb.

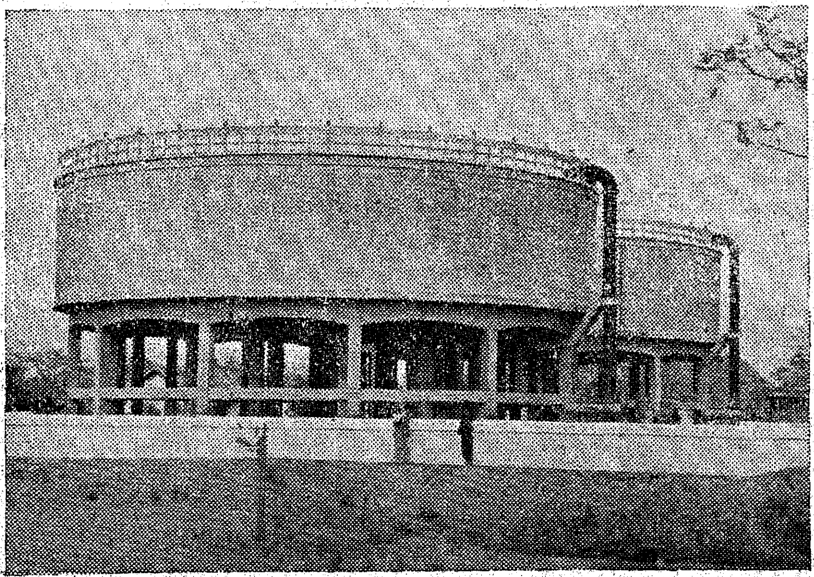
The original home of the *Sahiwal* breed is Montgomery District of Pakistan. Several pedigree herds of this breed are being developed in Punjab, Delhi, Uttar Pradesh, Bihar and Madhya Pradesh. Efforts are being made to multiply them as rapidly as possible.

Pilot Survey on Crop Production Costs

The Government have ordered an enquiry into the cost of production of crops on a random sampling basis, in accordance with a prepared scheme.

The enquiry contemplated by the scheme will be exploratory in character and will be in the nature of a pilot survey. It will be directed mainly towards finding out the total farm costs and the cost of production of the major crops in the holdings and localities to be selected. The villages and holdings, for the purpose of this enquiry, would be from among the villages chosen for crop cutting experiments, excluding those selected for experiments on Grow More Food aids.

This action has been taken, in view of the importance of cost of production studies, for evolving agricultural policies and development programmes and also for formulating suitable price policies.



WATER TANKS: These two reservoirs in the Salem Water-Supply System, each have a capacity of 250,000 gallons.

Two 'Vegetarian Fishes'

By SRI V. D. SPURGEON, Head of the Fisheries Section, Central Polytechnic, Madras

Today the food scarcity in India in general and Madras State in particular is acute. We are forced by circumstances beyond our control to manage on meagre rations. The Government and public spirited individuals voice forth their concern over this disquieting situation from the platform and through the press and appeal to us to follow rigorous measures of austerity, to change the dietary habits and also to grow more food. The public must rise up to the occasion. We should economise in the use of rice, change slowly to wheat, vegetables, etc., and grow food of all kinds.

In attempting to "grow more food" emphasis is always laid on growing more paddy alone. Recently growing fruits and vegetables is also included in the programme. But besides our staple diet rice and vegetables, there are some products which can be styled *protective foods*. Nutrition workers and doctors call these "*protective*", because they maintain the stamina of people at a high level and thus protect them from tuberculosis, malaria, anæmia, diarrhoea and other diseases. They are also called 'nutritive' foods for they are essential for good growth and for the repair of tissues damaged by daily work and by ill-health. These protective foods are milk, butter, eggs, meat and fish.

Fish as Protective Food

Can we grow fish-food in our garden pool or cement cistern or large tank as the case may be ? In Bengal it is a common sight to see one or more ponds in every house compound. Others there own a tank or a swamp outside the town wherein they grow fish for their own use. That is quite easy in Bengal where by Nature's benevolence there is a mighty river system (Ganges) and good fish fry sources. The peasant, the landlord, the businessman or the officials can collect fry 'from river' or purchase 'spawn' (fish eggs and larvae) from a fry merchant and throw it into his otherwise useless tank and reap a good harvest of fish from time to time. Nothing is spent on food of fish or upkeep of the water source.

In Madras the condition is slightly different. Such a mighty river is not found here but yet we have our Godavari, Krishna, Tungabhadra, Pennar, Cauvery, Periar and Tambaraparani. In the deltaic regions through which these rivers flow (viz., the Godavari, Krishna, Kurnool, Nellore, Tiruchirappalli, Tanjore, Madurai and Tirunelveli Districts) are found innumerable tanks, ponds, swamps, pools, puddles, lakes, reservoirs, etc. Some are perennial, while others are long and short seasonal. These lie fallow for most of the time. Water is drained for irrigation throughout the year. Seldom do we think of harnessing water sources for purposes more than one. In some places with the existence of natural facilities water is impounded and made to produce electricity. The other use, namely, of growing fish in them side by side with agricultural and electrical interests has not been fully examined.

The Fisheries department is doing a lot these days in utilising larger sources of waters. It is the aim of this article to show how best individuals who own even a small piece of water, say even one acre of waterspread or a garden pool or a large ornamental cement tank in a park or garden or in bungalow premises could contribute their mite in the national struggle to increase *protective* food supply.

If we go round the city and see public parks and gardens, we never fail to see ornamental pools in each place. Do these yield any fish ? If we make our inspection more intensive and pay visits to bungalows and houses with a garden, don't we come across countless large ornamental cement tanks and cisterns ? Do these yield at least a few pounds of table fish ? To a layman these small water sources may seem unsuitable for fish culture. Yet two of the best table fishes can be comfortably grown, bred, and fattened for the table in limited spaces. They live on water plants alone, hence they can be termed "Vegetarian fishes."

The Gourami

Gourami is the popular English name of an exotic fish now established in Madras. The scientist calls it *Osphronemus Goramy*. In Tamil areas it is known as *Sangara*; there is no name for it in Telugu.

It is a native of Java and in the year 1866 Sir William Denison—then Governor of Madras—imported it. A few Gourami were introduced for the first time in Guindy and Mount Road Government Houses. This attempt by a non-technical officer was a great success and today we have Gourami everywhere, thanks to the far-sighted efforts of Denison.

Gourami is a remarkable fish. Firstly, it has a graceful form with two long filamentous rays—one on each side starting from the ventral fins. The body is compressed and broad. The rate of growth is 4″ in the first year, 8″ in the second year and 11″ in the third year. The maximum growth is 24″ and weight 8 lb. Usually the growth is 18″ and weight 4 lb.

The fish fattens on artificial diet as oilcake-paste and bran. It is primarily a vegetarian. It eats with great avidity waterlilies, lotus, Hydrilla, Vallisneria and other weeds. Therefore it is easy to feed the fish. A tank filled with water weeds or a garden pool or cement tank of even $2\frac{1}{2}'$ depth where water weeds have been transplanted are ideal for this fish. Occasionally it swallows a worm or insect.

Gourami can be Tamed Easily

It is an air-breather also. Besides inhaling air dissolved in water through its gills, this fish frequently ascends to the water surface, thrusts its robust snout outside the water and gulps in pure air and withdraws to the bottom. This habit is welcome as incidentally it offers a pleasing sight to onlookers. In public parks where I introduced Gourami, the public used to flock to see the rising and disappearing Gourami.

If treated gently it responds admirably. If you regularly feed a pair, say at 5 p.m., the pair comes up sharply

5 o'clock and looks up for food. If the feeding has been regular it follows you around the tank expecting tit-bits. You can have oilcake-paste rolled into small pellets or bran or a piece of bread or a shoeflower in your palm and hold it almost on level with the water surface. Then the fish picks it up gracefully from your palm, gulps it and goes down to reappear for a second course, if you are generous enough. It is easy to keep Gourami in a glass table aquarium. Students are taught in the Central Polytechnic how to keep it even in small glass jars. It is most interesting to watch its movements.

Breeding and Hatching

Another peculiarity about this fish is that the male and female can be distinguished. In the majority of the fishes sexes cannot be outwardly made out. But in Gourami the male has a pronounced cephalic knob on its forehead and has a thick lower lip, whereas the female has no knob, and the lip is thin and 'sweet'! Both collaborate and build a nest as big as a bird's nest, spherical like football, underwater with water weeds. The opening is kept to face towards the centre of the tank and "floating eggs" are carefully put inside the nest and made to remain there without coming out. If one meddles with the nest or the eggs, all the eggs get dislodged and spring up to the top and you can never put them back in the nest.

Favourable Factors

After hatching, the parents carefully escort the young ones and teach them to feed and to protect themselves from enemies. The Gourami does not lay too many eggs. This is a handicap for culture. But look at the redeeming features : (1) The growing even in a small cement tank; (2) It feeds on useless vegetation; (3) It has a fairly good rate of growth; (4) It is beautiful and useful as a aquarium fish; (5) It has the nest-building nature and parental care for the brood; (6) and last and not in the least it tastes good. Those who have tasted a Gourami can never forget the taste! Such a dainty freshwater table fish and with such few bones is not easily found elsewhere.

The Pearl Spot

The Ichthyologist calls it *Etroplus Suratensis*. In Tamil it is known *Sethakendai*, in Telugu *Duvanachappa* and in Malayalam *Kari-meen*. It is another vegetarian fish. It eats weeds and has a great partiality for hair-weed (*Spirogyra*). The fish has a light green colour with eight dark transverse bands. The scales above the lateral line have a central white pearly spot and hence the popular name "*Pearl Spot*."

It is a common backwater perch. The body is flat and broad. The dorsal fin has several sharp spines and thus the fish manages to escape predaceous fish or other enemies who try to prey upon it.

Merits of Etroplus

The special advantages of this fish are as follows: (1) It is easily obtained from backwaters throughout the State. The collection or purchasing cost is very small. (2) It thrives and breeds in salt water, fresh water, slightly brackish water, still waters, running waters and even in cement tanks. What a good-natured fish! No other fish in Madras State or for that matter in the whole of India, behaves like the Etroplus. Not only does it grow in any type of water but it also breeds anywhere. One cannot think of any another fish to excel Etroplus in this respect. Gourami though so tasty, does not thrive in salt water and deep-reservoir and fails to breed in them. So its use is thus limited, whereas Etroplus can be grown in any type of water.

Its diet is also simple. Small weeds are its food. It is easy to provide this hairweed, *Spirogyra*—in Tamil *Pasam*—in the tanks for Etroplus; it is the most delicious food. Etroplus is sporting too! By that is meant that it responds with alacrity to anglers. Even a crude hook (made by bending a small paper-pin) and a bit of earthworm bait attracts this fish. For breeding you have to keep a few stones under water so that the fish may attach its eggs on them. The sex cannot be made out in the Etroplus, but there is the same parental care as in the case of Gourami. Occasionally the Etroplus also, like the Gourami, has no objection to worms, though both are avowedly strict "vegetarians"!!

Training in Gardening

The Agri-Horticultural Society, Madras, will start another course of training in gardening on the 1st July 1952 covering a period of 12 months. Applications must be made on the prescribed form which may be obtained from the Honorary Secretary. The last date for the receipt of applications is the 5th June 1952. Applications received after that date will not be considered.

Eight candidates will be admitted to this course. They will receive a monthly stipend which will be decided upon by a special selection committee. A portion of the stipend will, however, be withheld and paid as a reward only upon satisfactory completion of the course.

Four more candidates who may be deputed by District Boards, Municipalities, or Institutions, will be admitted. A fee of Rs. 50 will be charged per head in this case.

Candidates must be males not below the age of 15. They must be literate in one of the vernaculars and must be able to read and write in their own vernacular. Those students who complete the course of training satisfactorily will be granted a certificate from the Society. In view of the increasing demand for trained gardeners, it is expected that all the men so trained will be suitably employed.

Applicants must be of good physique and must be prepared to do manual work.

They will be selected by a special committee and should be prepared to come for interview to Madras at their own expense.

DR. RICHARD APPEL,
Honorary Secretary.

The Agri-Horticultural Society,
Cathedral P.O., Madras-6.

P. & T. Facilities in Madras Circle

There was an all-round extension in all the Postal and Telegraph facilities available in the Madras Circle during the year 1951–52, according to a review outlined by Sri C. V. Rajan, Postmaster-General, Madras, to the Postal and Telegraph Advisory Committee, which held its 11th meeting in Madras recently. Sri C. V. Rajan disclosed that nearly 4,000 additional appointments were made in all grades in the Madras Circle alone, where 81 additional mail motor services covering 1,600 miles were introduced and 1,600 new letter boxes were planted, mostly in rural areas, during the year under review. The service was increased to daily frequency in 1,500 villages; and even more important than that was the opening of new post offices in 1,420 villages with a population of 2,000 and above, by way of implementing the Post-war Plan. Telegraph facilities were provided in 31 more towns, while still five more towns will get them within the next two months.

The Mobile Post Office which has been introduced in Madras City since August 1, 1951, has been greatly appreciated and has provided the public the maximum facility for posting and registration at later hours.

Additional Phone Connections

During the year ending March 31, 1952, three new Exchanges were opened at Srikakulam, Karur and Chingleput while three more Exchanges are expected to be opened during the course of the next two months respectively at Erode, Dindigul and Davangere, thus bringing the total number of Exchanges to 102 with nearly 15,000 connections.

At the same time, there has been a considerable expansion of existing exchanges. Nineteen Telephone Exchanges have been expanded to provide for more than 1,500 additional connections. The more important of these are at Bangalore City, where 400 additional lines were provided, at Madurai with 300 additional lines, and at Salem, Kurnool and Tiruchirappalli each with 100 additional lines. It is expected that in the course of the next two months, eight more Exchanges will be expanded to provide for 860 additional connections, out of which Vellore and Mysore will each have 200 and Tirunelveli 100 additional connections.

Sixty-three public call offices with trunk facilities have since been opened, bringing the total for the whole Circle to 372 P.C.Os. It is expected that within the next two months 25 more public call offices will be opened.

Successful Functioning of Committee

Sri C. V. Rajan, Postmaster-General, presiding over the meeting of the Committee, pointed out how the fruitful functioning of Postal and Telegraph Advisory Committee, Madras, could itself be listed as an important achievement of the year under review. This Committee, set up for the maintenance of close liaison between the Department and important beneficiaries of its services, has a membership drawn from Members of Parliament, Members of the respective State Legislatures, State Governments and trade interests. Besides meeting quarterly to discuss actual, concrete and local problems relating to the administration of Postal, Telegraph and Telephone services, the Committee has also familiarised itself during the year with the actual functioning of the postal and telegraph systems and the Telephones and the Overseas Communication Service, by visiting them and studying them at close quarters.

Rural Water Supply

The Government have sanctioned an allotment of Rs. 6,34,800 in addition to the provision of Rs. 81,94,760, already sanctioned, for rural water-supply schemes in 1951–52.

New Telephone Exchanges

A 100 line C.B. telephone exchange was opened at Dindigul on March 27, 1952, with 63 connections.

A Trunk Call P.C.I. was opened at the Mount Road Post Office on service from April 3, 1952.

A telephone public call office, connected to the general trunk system was opened at Bapatla P.O. on March 24, 1952.

A telephone public call office at Yercaud connected to the Salem Telephone Exchange was opened on March 16, 1952.

A public call office has been installed at the junction of Bharathamatha Street and Nalvar Street, East Tambaram, on March 12, 1952.

A telephone public call office at Katapadi (South Kanara) connected to the Udipi Exchange was opened on March 17, 1952.

A non-delivery post office was opened on March 28, 1952 at 10/30; Mount Road (Gopala Pillai Buildings), Madras.

Inspector of Police Removed from Service

The Government have ordered the removal from service of Sri S. M. Veeranna Thevar, formerly Inspector of Police, Palni, on the basis of the recommendation of the Tribunal for Disciplinary Proceedings which held an enquiry into certain charges of corruption and high-handedness against him.

Famine Relief in Rayalaseema

The Hon'ble Rajkumari Amrit Kaur, Minister for Health, Government of India, has kindly issued instructions to the Director-General, Health Services, New Delhi, for sending to Rayalaseema, now under the grip of acute scarcity conditions, 60,000 lb. of condensed milk and 2½ lakhs of multi-vitamin tablets for free distribution in the area. The condensed milk, the market value of which will be nearly one lakh of rupees, was received from the Governments of the Netherlands and Switzerland and the multi-vitamin tablets costing nearly Rs. 10,000 was from the fund donated by the Indian Famine Relief Committee, Melbourne, Australia. Arrangements are being made to distribute them through the District Collectors.

Discontinuance of Well Subsidy Schemes

In a Press communique, dated June 7, 1951, the Government informed the public that subsidy loans under the New Well Subsidy Scheme, 1951–52 were being granted on a restricted scale. This restriction in the scope of the scheme was necessary as the Government of India, having regard to the changed policy regarding financial assistance for Food Production Schemes, desired that the area of operation of the Wells Scheme during 1951–52 should be confined to a few chosen areas like Central districts where well irrigation was the only feasible and economical mode of irrigation and where the water table was comparatively high. The allotment towards the disbursement of subsidies during 1951–52 was only Rs. 38 lakhs as against Rs. 152 lakhs for 1949–50 and Rs. 76 lakhs for 1950–51.

Since 1944, the Government have sanctioned eight schemes for the grant of subsidies for the sinking of new wells or for repairing or improving old ones. Under all these schemes, about 217,000 wells were subsidised and about 51,600 wells remained to be completed at the end of January 1952. Time has been granted for the completion of these wells till June 30, 1952.

The continued drought for the last five years has made the water table fall steeply and many wells have consequently dried up. Often the installation of a powerful pump in a big private well has also meant the complete drying up of many smaller subsidy wells connected by the water veins with the big well. There is also good private enterprise in tapping this form of irrigation. Having due regard to these aspects, the Government consider that it is time to cry a halt to this scheme and to consolidate the work already done. They have accordingly decided not to continue the Well Subsidy Scheme in the present form during 1952–53. It is, however, open to the ryots who are keen on sinking wells, to obtain loans from the Revenue Department under the Land Improvement Loan Act.

Registration Certificates of Motor Vehicles

The District Superintendents of Police in the mofussil are now issuing Registration Certificates of motor vehicles, Driving Licences, Conductor's passes, etc., while the work connected with the issue of permits for transport vehicles, appeals against orders relating to issue of driving licences, etc., is being done by the Regional Transport Officers concerned. The Government have had under consideration the question whether the work relating to the issue of registration certificates, etc., cannot be transferred to the Regional Transport Officers with a view to afford greater convenience to the public. They have now decided that the scheme may be tried, as an experimental measure, in the districts of Tiruchirappalli and Krishna for a period of one year with effect from April 1, 1952.

B.Sc. (Eng.) of Travancore University

The Government have directed that the B.Sc. Degree in Electrical and Mechanical Engineering of the Travancore University be deemed as equivalent to the B.E. Degree of the Madras University in the respective branches of engineering.

Four Sugar Factories

Under the post-war programme for the expansion of the sugar industry in Madras State, the Government are considering the question of the establishment of four sugar factories by private enterprise in the following areas :

Area.			*Daily cane crushing capacity.* TONS.
North Arcot District	..	..	800
South Arcot District	..	..	800
Coimbatore District	..	..	450
Tiruchirappalli-Tanjore area		..	500

In view of the urgent need to make the State self-sufficient in respect of sugar, the Government are anxious that these factories should be set up as quickly as possible. They will be prepared to consider the question of granting all reasonable facilities to the promoters for the establishment of the factories. Persons or companies with the necessary business experience and financial resources and who are anxious to start sugar factories in these areas in collaboration with the local cane growers without expecting financial assistance from the Government, may apply to the Secretary to Government in the Development Department, Fort St. George, before 10th May 1952. The application should furnish *inter alia* detailed information on the following points :

(1) Names of the promoters and their financial standing ;

(2) Business experience ;

(3) Proposed location of the factory ; and

(4) The time within which they will be able to put up the plant and start manufacture of sugar.

Visas for Foreign Visitors

The Government of India have observed that on a number of occasions non-official organisations or private persons have invited foreigners to attend conferences, discussion groups and lecture tours. Not infrequently both the persons invited and their hosts have been put to great inconvenience, because of the delay or failure to obtain the necessary visa facilities for visiting the country. The Government of India wish to emphasise that, in order to avoid this difficulty, it will be desirable for private persons and non-officials bodies to inform, in advance, the Government of India in the Ministry of Home Affairs, of their intention to invite foreigners. Only after the Ministry of Home Affairs have agreed to issue visas in favour of the persons, whom it is proposed to invite, should invitations be sent out. This will prevent last-minute rush, inconvenience and possible misunderstandings.

Neera

By Sri RADHAKRISHNA RAO, Nutrition Expert, Government of Bombay

The sweet juice obtained by tapping any sugar-yielding Palm tree is called Neera. The silver 'blood' of the Palm trees has a pleasant delicious taste, and an agreeable flavour. When freshly drawn from the tree, it is slightly alkaline to litmus, but in course of time, becomes more and more acid. In India, it is usually obtained from the Palmyra (Tad), Coconut (Narial), Sago Palm or Wild Date Palm (Khajoor) trees.

Neera is sweet in taste and contains over ten per cent of sugar. It is a health-giving drink and can be consumed in any quantity without harm to the system. Apart from the various nutrients (including vitamins) present in the juice, Neera also contains variable quantities of mucilage which is of doubtful nutritive value. This mucilage along with most of the yeast, however, separates and settles down when Neera is treated with lime.

The chemical composition of Neera (fresh Date Neera) is given below:

Specific gravity	1·07
pH	6·7 — 6·9
Nitrogen	0·056 gm. per 100 ccs.
Protein	0·35 gms. ,,
Total sugars	10·93 gms. ,,
Reducing sugars	0·96 gm. ,,
Ash (Minerals)	0·54 gm. ,,
Calcium	Traces ,,
Phosphorus	0·14 gm. ,,
Iron	0·04 mgm. ,,
Titrable acidity	8·75 ccs. of N/10 alkali.
Vitamin C	13·25 mgms. per 100 ccs.

Tapping of the juice from the Palm trees is a delicate operation and requires much care and skill. The earthen pots in which the juice is collected are usually lined with slaked lime. The amount of lime added depends on the amount of juice from the tree, and only experienced tappers will be able to say as to how much juice will be produced, depending on the weather, locality and the tree. Probably limed Neera is bright and transparent, the lime settling at a bottom of the pot. If less lime is used, the Neera becomes hazy and sour, due to the growth of yeast, and if the quantity of lime added is more than the required amount, the Neera has a milky and bitter taste.

In very cold climates, addition of lime is not absolutely necessary, since no perceptible change takes place within 12–14 hours, between sunset and dawn, when the pot is suspended for collection of the sap.

The addition of lime in the pots for Neera collection is not an innovation, but has been practised since ages. In fact, with all the advancements in science and improvements in methods, we have not been able to find out any other equally harmless or efficient preservative. It is true that due to the addition of lime, vitamin C of Neera is destroyed. The advantages of lime as a preservative are: (1) the amount added to the juice is harmless to the system, and (2) it does not allow the pH of the Neera to decrease below 7, and thus retards alcoholic fermentation.

Recently doubts have been expressed in certain quarters that the addition of lime to Neera is detrimental to habitual drinkers of Neera, that calcium taken frequently causes premature thickening of the arteries and causes kidney trouble. In this connection it may be stated that for every 10 lb. (approx. 20 glasses) of Neera, the portion of lime used is only 6 ccs. of a 20 per cent solution, and even part of this lime so used precipitates and settles at the bottom along with the yeast, and is not consumed along with the Neera. In fact, a person chewing betel leaves consumes much more lime than that present in nearly 5 lb. of Neera. In order to enhance the nutritive value of bread, wheat flour is fortified with calcium. Calcium intake of the people of this country is far below the minimum requirements, and for this fact alone, apart from others, the intake of additional calcium along with the sugars is to be recommended.

Another objection raised against the use of lime to prevent fermentation is that it makes the Neera alkaline and makes it a favourable medium for the growth of pathogenic organisms. Unless necessary precautions are taken and strict cleanliness maintained in collection and distribution, any food article (e.g., milk and milk products) is liable to be contaminated, and the danger of food-borne diseases is always there. The obvious method of averting such risk lies in the increase of greater vigilance on the part of those handling the food, and the risk in no way arises from the addition of lime to such a nourishing drink as Neera.

(Tad Gud Khabar)

Educational Concessions for Demobilised Personnel

The Government have directed, in modification of their previous orders, that assistance under the Further Education Scheme to demobilised personnel will not be granted to students, who after being compelled to discontinue the course of study for valid reasons, do not take up the course again before the expiry of one year from the date of discontinuance of studies previously undertaken or in cases of failure at examinations, before the expiry of one year from the date on which the student becomes eligible to continue the higher studies. All cases of break in studies exceeding one year will be decided by the Further Education Board.

Books Received

TRIMURTI ALMANAC, 1952–53

For the Tamil year Nandana, containing 68 pages and priced at 7 annas. Published by the Suguna Publishing House, 60, Iswaran Koil Street, Mambalam, Madras-17. Edited by Sri K. S. Srinivasan of Akkur.

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS, AND EDITED AND PUBLISHED BY THE DIRECTOR OF INFORMATION AND PUBLICITY, GOVERNMENT OF MADRAS.